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1819C

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Seaman's Journal.

JOURNAL OF A VOYAGE

From

Java

to

Salento and Cal

in the

commanded

by

Begun

18

and termi-

nated

18

KEPT BY

Capt Charles



Sold by **HENRY WHIPPLE**, at his Bookstore
and Lottery Office,
FRANKLIN PLACE,....SALEM....

ESTABLISHED 1847

OF A TOY

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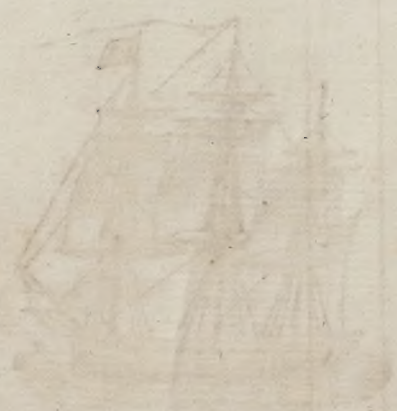
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ASTOR LENOX TILDEN FOUNDATION

Ship Burma.

6 lines from person towards Salem

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	3	4	S W	W		Commences with fresh
2	4	3	N			brises and gentle winds
3		5				
4	4	5	W			
5	4					
6	4					
7	4					
8	4					
9	6					
10	7					
11	7					
12	7					
1	7					
2	7					
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12						

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
					ask				

H.	K.	H. K.	Courses.	Winds.	L. W.	Remarks
1						
2						
3						
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9						
10						
11						
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Course	Dist	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
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[illegible]

towards

H.	K.	H.K. Courses.	Winds.	L.W.	Remarks
1					
2					
3					
4					
5					
6					
7					
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9					
10					
11					
12					
1					
2					
3					
4					
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7					
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10					
11					
12					

[illegible]

H.	K.	H. K.	Courses.	Winds.	L. W.	Remarks
1						
2						
3						
4						
5						
6						
7						
8						
9						
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11						
12						
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12						

[illegible]

<i>from</i>						<i>towards</i>
H.	K.	H.K.	Courses.	Winds	L.W.	Remarks
1						
2						
3						
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5						
6						
7						
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9						
10						
11						
12						
Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.

Hiram Putnam Master

China from Batavia towards Salem

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1						Tuesday Jan 5 th 1819
2						Commences with fresh bree-
3						zes and cloudy, all necessary
4						sail set. Unbent the cu-
5	5					bles and coiled them below.
6	5	5	SWB	NEW		
7	5					At 7 P.M. Java Head bore
8	6					NE. B.E. Distance 7 leagues.
9	5	4	SW	WB		Middle part fresh breezes &
10	5	4				squally took in T. G. sails
11	5	4				
12	5	4				
1	6	4				
2	6	4				
3	6	4	SWB			
4	6	6				
5	6	6				
6	6					
7	5	4				
8	6	10				
9	6		SW	W		
10	6	4		due W		Ends cloudy
11	6	2				
12	5	5				

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
S 30 W	100	91	52	8.25	20		60	103.52	

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	10		SW			Wednesday Jan 6 th 1819
2	5			The		Begins with fresh bree-
3	3	4		Wind		zes and cloudy all necessary
4	4	4	due S			sail made.
5	4					
6	3		S B W	Variable		
7	4	4	due S			
8	4	4	S S W			
9	4					
10	4		SW			Middle part light bree-
11	4					zes and cloudy with light
12	5	5				squalls.
1	4	4	SWB			
2	4					
3	4					
4	4					
5	4		SW			
6	3					
7	2		SW			Latter part light breezes
8	2	5				and heavy rain.
9	2	5	SW			
10	2	5	SW			
11	6					
12	6					

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
S 29 W	94	82	46	9.50			47	102.45	20

Ship China

China from Batavia towards Salem

H.	K.	H.K.	Courses.	Winds	L. W.	Remarks
1	6		SW	NNE		Thursday Jan. 7 th 1819
2	7	2				Commences with fresh breezes and thick cloudy weather
3	7	5				
4	7	7		NBE		
5	7			due N		
6	6					At 2 P.M. clear set the Royals and flying jib stay sails
7	4		SW ² S			
8	4	5				
9	3	6	SSW			
10	3	4		due W		
11	3	4	SW ² S			
12	3	2				
1	2	5				standing sails on the starboard side
2	2					
3	3					At 3.45 strong breezes took in the Royals and flying jib
4	3					
5	2	+				At 5.30 in staysails
6	2					
7	2					
8	2					
9	2					
10	2		SW	NNE		
11	2					
12	2					Latter part moderate.

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
S 31 W	90	77	44	11.07	11.30	5	47	101 58	

H.	K.	H.K.	Courses.	Winds.	L. W.	Remarks
1	1	5	SW	NNE		Friday Jan 8 th 1819
2	1	4				Begins with light airs and pleasant weather all sail set to advantage.
3	2					
4	2					
5	2	5				
6	2	5				
7	2	4				
8	3					
9	3					
10	3					
11	3					
12	3	5				
1	2	4				
2	3					
3	3					
4	2	4				
5	2	5				
6	2	5				
7	3					
8	3					
9	2					
10	2					
11	2					
12	3					

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
S 42 W	100	44	40	12.14	12.09	5	45	101.17	

Hiram Putnam Master

China from Java towards Salem

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	3		SSW	ENE		Ship under all necessary sail the wind being moderate and pleasant weather.
2	2	5		NE		
3	2	5				
4	3			NNE		
5	3					
6	3					
7	3	3				
8	3	4				
9	2	4				
10	2					
11	1	5				
12	1	5				
1	2	5				At 3.30 P.M. took in jibs & staysails at 6 dark and cloudy took in the studding sails & flying jib. Middle part light breezes & cloudy At 6 A.M. squally with constant rain. Ends calm.
2	2	5				
3	2					
4	1					
5	0					
6	1	4		S 15 W		
7	1	7				
8	2					
9	0					
10	0					
11	0					
12	0					

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
S 19 W	44	42	14	12° 51'	12° 50'	3°	43	100.24	

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	0					Sundays Jan 9 th 1819 Begins with a calm and a heavy swell from the SE At 3.30 P.M. a heavy squall from the S.W. took in all the light sails and packed ship to the S & E. At 9 P.M. set the staysail flying jib and M. royal. Middle and latter parts light breezes and squally.
2	0		Calm			
3	0					
4	2	4	W 1/2 N	S 1/2 W		
5	2	4	SE 1/2 S			
6	3	5		variable		
7	1	5	S 1/2 W			
8	1	10				
9	2	4				
10	1	5				
11	0	5				
12	1					
1	1		SSW			At 9 P.M. set the staysail flying jib and M. royal. Middle and latter parts light breezes and squally.
2	2					
3	2					
4	1	4				
5	2		S 1/2 W			
6	2					
7	2		S 1/2 W 1/2 N			
8	2					
9	3					
10	3					
11	3	4	S 1/2 W			
12	3		S 1/2 W 1/2 S			

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
S 42 W	35	27	23	13° 10'	13° 13'	3°	24	100	

Ship China

China from Tava towards Salem

N.	K.	H.K.	Courses.	Winds	L.W.	Remarks
1	2		SWBS	SEBS		Monday Jan 11 th 1819
2	1					Begins with light bree-
3	1					zes and pleasant all neces-
4	1					sary sail set. At 9 P.M
5	1					in royals and flying jib.
6	1					At 10 P.M squally took
7	0					in Mizen top got sail at 11
8	0	Calm				set Mizen top got sail.
9	0					Middle part light breezes
10	4	4	SWW	due W		& pleasant.
11	4	4				Latter part calm.
12	3	4				
1	2		SESE			
2	1					
3	0					
4	1		SW	SE		
5	1	4				
6	2	3				
7	2	4				
8	2					
9	2					
10	1					
11	0					
12	0					

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
S 16 W	32	31	8		13. 41	5. 04	9	99. 51	

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	0					Tuesday Jan 12 th 1819
2	0			Variable		Begins with a calm.
3	1	4	SWW			At 2 P.M. light airs & pleas-
4	1	4	SWSW			ant At 8 P.M. tacked ship
5	1		SEBS			to the S.E. at 10.30 to the W
6	1					Middle part light breezes
7	1	4				& pleasant.
8	1					At 5 A.M. set the royals &
9	3		SESE			flying jib.
10	2		SWBS			
11	1		WBS			
12	2	5				
1	2	5				
2	3	4	WBS			
3	4	3				
4	4					
5	4					
6	0					
7	3	5	WBS			
8	4	5				
9	4	5				
10	5					
11	5		WBS			
12	4					

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
76	47	14	25	13. 54	13. 50	5 40	47	99 04	

Hopram Putnam Master

China from Java towards Salem

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	4		WBS	SBSW		Wednesday Jan 13 th 1819
2	4					Begins with moderate
3	4	5				breezes and pleasant weather
4	4	7				all necessary sail made.
5	4	4				People employed in getting in-
6	4	3				board the anchors &c.
7	4	5				At 2 P.M. saw a sail sta-
8	3	5				nding to the Westward. At
9	4					9 took in staysails.
10	4					Middle & latter parts pleas-
11	3	4	WSW	due S		ant breezes & passing clouds.
12	3					
1	3	4				
2	4					
3	4		WBS	SBSW		
4	3					
5	3	3				
6	3	4				
7	4	4	WSW	South		
8	4					
9	4	5	SWBS	SSE		
10	5					
11	5					
12	4					

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
S 36 W	95	38	87	14 34	18 41	5 40	90	97.34	

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	4	4	WSW	South		Thursday Jan 14 th 1819
2	4	3				Commences with fine ple-
3	5					asant weather and moderate
4	5					breezes. all necessary sail set
5	5	6	WBSSE	SSE		Middle part fresh breezes.
6	5	4				At 4.30 P.M. breeze freshening
7	5	4	WSW	due S		took in the Royals and fly-
8	5					ing jib.
9	5	4				
10	5	4	WBS	SSE		
11	4	6				
12	5	4	WSW	South		
1	6					
2	6					
3	6	4				
4	6	4				
5	7	3				
6	6	5				
7	6	6				
8	7					
9	6	4				
10	6	4				
11	6					
12	5	6				

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
67	138	53	127	15.27	-	5	132	95.22	

Ship China

China from Java towards Salem

H.	K.	H.K.	Courses.	Winds	L. W.	Remarks
1	5	5	W 1/2 S 1/2 W	S 1/2 W		Friday Jan 15 th 1819
2	5	5				Begins with fresh breezes
3	6	6				and cloudy weather all morn.
4	6	6				afternoon sail made.
5	6	6				
6	6	6				
7	5	5				
8	6	6	W 1/2 S 1/2 W	South		
9	6	6				
10	7	7				Middle part fresh breezes
11	7	7				and pleasant.
12	7	7				
1	6	6				At 1 P.M. set M. royal and
2	5	5				flying jib.
3	5	5				
4	5	5				
5	7	7				Latter part fresh breezes
6	6	6				and passing squalls. At 8.30
7	7	7				U.M. set fore top mast sled-
8	6	6				ingsail. At 10 took in sail
9	6	4				
10	6					
11	7		W 1/2 S 1/2 W	S 1/2 E		
12	7					

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
S 68 E	162	60	149		15 59	11	155	92 47	

H.	K.	H.K.	Courses.	Winds.	L. W.	Remarks
1	7	6	W 1/2 S 1/2 W	S 1/2 E		Saturday Jan 16 th 1819
2	7					Begins with fresh bree-
3	7	4				zes and passing clouds.
4	7	4				
5	7	3				At 10 P.M. the breeze fres-
6	7	6				hening took in fore and main
7	7	6				S. E. sails.
8	7	6				
9	7	4				
10	8					
11	8					
12	8					
1	7	6				
2	7	6				
3	7	6				
4	7	4				Middle and latter parts
5	7					strong breezes & cloudy
6	8					
7	7	6				
8	7	6				
9	8					
10	8	4				
11	8	6				
12	8	6				

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
S 71 W	185	59	91	16 58		2	174	89 53	

Hiram Putnam Master

China from Java towards Salem

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	8	6	W B S S	S S E		Ship under all necessary sail with fine fine breezes & pleasant weather. At 7 P.M. set main top mast studding sail. At 9.30 P.M. set main & mizen top mast studding sail. At 11 P.M. set the M. Royal & flying jib Middle part strong breezes & clear. At 6 A.M. set the lower studding sail. Ends strong breezes & pleasant.
2	8	6				
3	8	5				
4	8					
5	8	4				
6	8	4				
7	8	5				
8	8	8				
9	8	8				
10	8					
11	8					
12	8					
1	8					Middle part strong breezes & clear. At 6 A.M. set the lower studding sail. Ends strong breezes & pleasant.
2	8					
3	8	5				
4	8					
5	8					
6	8					
7	8					
8	8					
9	8					
10	8					
11	8					
12	8					

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
S 64° W	197	77	187	18° 10'		6°	140	86° 48'	

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	8	6	W B S S	S S E		Begins with strong breezes & passing clouds. all necessary sail made. Middle part strong breezes & passing clouds. At 5 A.M. set fore top mast studding sail. Ends strong gales and cloudy weather. I allow her to go S to the S of course!
2	9	2				
3	9	4				
4	9	5				
5	9					
6	8	4				
7	8	4				
8	9					
9	9					
10	9					
11	9	5				
12	9					
1	9					Middle part strong breezes & passing clouds. At 5 A.M. set fore top mast studding sail. Ends strong gales and cloudy weather. I allow her to go S to the S of course!
2	9					
3	9					
4	8	4				
5	8					
6	9					
7	9	3				
8	9	6				
9	9	4				
10	9	5				
11	9	5				
12	9	5				

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
S 64° W	217	95	195	19° 45'		6°	207	82° 16'	

Ship China

China from Java towards Salem

H.	K.	H.K.	Courses.	Winds	L. W.	Remarks
1	4	5	W B S	SE B S		Tuesday Jan 19 th 1819
2	0					Commences with strong breezes & cloudy all morning sail set.
3	0	5				
4	4	6				
5	0	6				
6	0	6				
7	0					
8	0	5				At 8 P.M. took in fore top mast standing sail
9	0	6				
10	10					
1	0	6				At 10 P.M. strong breezes & squally took in fore & mizen T
2	0	6				G. sails & single reefed the spanker.
3	0	7				
4	0					
5	0	4				
6	0	4				
7	0	5				Middle and latter parts strong breezes & cloudy all 6 A.M. set
8	0	4				T & M. T. C. sail.
9	0	5				
10	0	5				
11	0	5				
12	0					

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
173	224	44	214		19.35	6	227	78.24	

H.	K.	H.K.	Courses.	Winds.	L. W.	Remarks
1	9	4	W B S	SE		Wednesday Jan 20 th 1819
2	9	4				Begins with strong breezes and passing clouds. Set the fore top mast standing sail.
3	9	6				
4	0	6				
5	0	6				
6	0	6				
7	10	6				
8	10	4				At 10 P.M. took in the mizen top 3d sail.
9	9	6				
10	9	6				
11	9	6				
12	9	6				Middle part strong breezes and passing clouds.
1	9	6				
2	9	6				
3	9	6				
4	9	4				
5	9					
6	0	6				
7	0	6				Latter part strong breezes and a long irregular sea
8	9	4				
9	0	6				
10	10		SE B S			
11	10					
12	0					

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
73	230	67	229	20.02		6	215	255	

Hiram Putnam Master

China from Tuen towards Tuen										
H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks Thursday Jan 21 st 1879				
1	4	6	W 3/4 E	SE		Rains with strong breezes and cloudy weather with a high crisp sea.				
2	4	2								
3	4	6								
4	4	6								
5	4	6								
6	4	6								
7	10									
8	4									
9	4	4								
10	4	6								
11	10									
12	4	4								
1	4					Watch employed in working the sheet aback. At 1.30 P.M. set fore and main top gal sails. At 10 P.M. squally look in fore and M. T. gal sails. Middle and latter parts strong breezes and passing squalls.				
2	4	5								
3	4									
4	4									
5	4									
6	4	4								
7	4	6								
8	4	6								
9	4									
10	4	5								
11	8	5								
12	4									
Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.	
W 3/4 E	224	4.5	214	115 50	21 25	6	235	74.00		

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks Friday Jan 22 nd 1879				
1	9	6	West	ESE		Commenced with strong breezes and squally with a heavy following sea. At 7 P.M. took in fore and main top gal sails. At 10 P.M. reefed main top sail.				
2	9	4								
3	9	4								
4	9									
5	9	6								
6	4	4								
7	9									
8	9	10								
9	9	6								
10	19									
11	9									
12	8	5								
1	9					Middle part strong breezes and squally. Ends fine breezes & pleasant. May 1 allow 6° as usual.				
2	9	4								
3	9	4								
4	9									
5	9									
6	9									
7	9									
8	9									
9	9									
10	8	6								
11	8	4								
12	8	4								
Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.	
S 77 W	219	49	213		23.24	78	230	67.10		

Ship Chorea

China from Java towards Salem

H.	K.	H.K.	Courses.	Winds	L.W.	Remarks
1	9	6	West	SSE		<p>Saturday Jan 23rd 1819</p> <p>Ship under all necessary sail it being pleasant weather & passing clouds. At 1 P.M. squally took in the royal & furla jib. At 5 P.M. took in fore top Mast standing sail. Middle part strong breezes attended with squalls took in and maid sail as necessary. Latter part pleasant maid all sail necessary.</p>
2	9					
3	9	6				
4	9					
5	9					
6	6					
7	9					
8	9	5				
9	9	4				
10	9	4				
11	9					
12	9					
1	9					
2	8	6				
3	8	6				
4	8	4				
5	8	6				
6	9					
7	9	4				
8	9	6				
9	9					
10	8	5				
11	8	5				
12	6					

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
S 79° W	216	41	212		22.40	11°	224	63.23	

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	8	6	West	SSE		<p>Sunday Jan 24th 1819</p> <p>Begins with strong breezes and passing clouds. At 8 P.M. single reefed the top sails. At 9.30 P.M. took down top gal sail. Middle & latter parts strong breezes and squally. Variation per compass 10° W</p>
2	9					
3	9	4				
4	9	4				
5	9					
6	9	4				
7	8					
8	9					
9	8					
10	8					
11	8					
12	8	5				
1	8					
2	7	4				
3	8					
4	7	6				
5	6	5				
6	7					
7	6	5				
8	7	5				
9	15	5				
10	6	4				
11	6	6				
12	6	6				

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
S 44° W	189	32	184		23.24	10°	203	60.00	

Hyrum Putnam Musler

China from Java towards Salem

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	7	5	West	S B W		<p>Monday Jan 25th 1819</p> <p>Commences with strong breezes and cloudy, all necessary sail set.</p> <p>At 2 P. M. took in fore top mast studding sail.</p> <p>Variation per log at 7.17 A M. West 13°.</p> <p>Middle and latter parts strong breezes and pleasant.</p> <p>At 10 A.M. set staysails.</p>
2	7			South		
3	8					
4	8	7				
5	8					
6	8	4				
7	7	6				
8	8					
9	8					
10	8	3				
11	8	3				
12	8					
1	7	6				
2	8	4				
3	8					
4	7	6				
5	8					
6	8	4				
7	8	4				
8	8	6				
9	8	4				
10	8					
11	8					
12	8					

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
S by W 193	47	18			24 05	14	207	57 25	

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	8	4	West	S E		<p>Tuesday Jan 26th 1819</p> <p>Begins with fresh breezes and light passing clouds all necessary sail set.</p> <p>At midnight took in main top mast staysail being all ended with light squalls & small rain.</p> <p>Latter part strong breezes & pleasant.</p>
2	4	3				
3	4	3	W 2 S			
4	8	6				
5	9					
6	9					
7	9	3				
8	9					
9	9					
10	9					
11	9	6				
12	9	6				
1	10					
2	9	6				
3	9	6				
4	9					
5	9	4				
6	9	6				
7	9	6				
8	9					
9	9	4				
10	9	4				
11	9	6				
12	10					

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
S by W 222	75	20		25 21		15	229	52 34	

Ship China

China from Java towards Salem											
H.	K.	H.K.	Courses.	Winds	L.W.	Remarks	Wednesday Jan 27 th 1819				
1	9	4	West	SSE		Commences with strong breezes and heavy, all necessary sail set. At 10 P. M. strong breezes and squally look in top gal sails and single reefed the top sails At 3 A. M. double reefed the T sails. Var 10.34 Latter part strong breezes and heavy					
2	9										
3	9										
4	9	6									
5	8	6									
6	8	6									
7	9	7									
8	10										
9	10										
10	10	4									
11	10										
12	10	3									
1	10					At 3 A. M. double reefed the T sails. Var 10.34 Latter part strong breezes and heavy					
2	10										
3	9										
4	9	5									
5	9	4									
6	9	4									
7	9	5									
8	9	4									
9	9	5									
10	9	5									
11	10										
12	10										
Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.		
S 34 W	229	67	219	26 36	26 40	17	244	48.30			
H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks	Thursday Jan 28 th 1819				
1	9	6	West	SSE		Begins with strong breezes. At 10 P. M. Look in the pit and double reefed the spanker. At midnight reefed the main sail & handed it. At 6 A. M. down Royal yards. At 8 close reefed T. sails. At 9.30 in mizen top sail. Ends strong breezes & squally high swell from SE					
2	10										
3	9	6									
4	10										
5	9										
6	8	8									
7	9										
8	9	6									
9	8										
10	8	5									
11	9										
12	9	5									
1	9					South Ends strong breezes & squally high swell from SE					
2	9	4									
3	9	4									
4	9	4									
5	9										
6	9										
7	9										
8	9										
9	9	4									
10	9	6									
11	9	6									
12	9	4									
Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.		
S 72 W	224	69	213	27.49		18	244	44.34			

Hiram Putnam Master

China from Java towards Sumatra																															
H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks	Friday Jan 24 th 1814-																								
1	8	3	W 1/2 N	S 1/2 E		Begins with strong gales and a high cross sea. At 2.30 P.M. reefed the fore sail and hauled the main sail. At 6.30 P.M. set the reefed M sail. At midnight let the reef out of the fore sail & set the mizen top sail. Ends more more moderate maid sail as necessary																									
2	5	5		Variable																											
3	5																														
4	7																														
5	7	4																													
6	6	5	S 1/2 W																												
7	6																														
8	3																														
9	4		N 1/2 W																												
10	4																														
11	4	4	N 1/2 W																												
12	3																														
1	4		N 1/2 W 1/2 W																												
2	4																														
3	4		N 1/2 W																												
4	3																														
5	3	4	due N																												
6	2	4																													
7	3	4	S 1/2 W																												
8	3																														
9	3		S 1/2 W 1/2 W																												
10	2	5																													
11	2	5																													
12	2		South																												
<table><tr><th>Course</th><th>Dist.</th><th>Diff. Lat.</th><th>Dep.</th><th>Lat. by D. R.</th><th>Lat. by Ob.</th><th>Varia.</th><th>Diff. Long.</th><th>Long. in</th><th>Long. by Ob.</th></tr><tr><td>184</td><td>92</td><td>10</td><td>49</td><td>2nd 30</td><td>2nd 49</td><td>18</td><td>112</td><td>42 38</td><td></td></tr></table>												Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.	184	92	10	49	2 nd 30	2 nd 49	18	112	42 38	
Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.																						
184	92	10	49	2 nd 30	2 nd 49	18	112	42 38																							
H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks	Saturday Jan 30 th 1814																								
1	4		N 1/2 W	S 1/2 W		Begins with moderate breezes and pleasant moderate all sail necessary. Middle part squally look in staysails and fore & mizen top gail sails. At 7.00 A.M. more steady breezes set the F S & G sail. Ends strong breezes & pleasant.																									
2	4	2																													
3	4	4																													
4	4	4																													
5	5		N 1/2 W	S 1/2 W																											
6	5	7																													
7	6		N 1/2 W																												
8	6	2																													
9	6																														
10	6																														
11	5	5																													
12	5	5																													
1	6																														
2	6	6																													
3	6																														
4	9																														
5	9	2		South																											
6	9	5																													
7	8			S 1/2 E																											
8	9																														
9	9	4																													
10	9	4																													
11	9	6																													
12	9	6																													
<table><tr><th>Course</th><th>Dist.</th><th>Diff. Lat.</th><th>Dep.</th><th>Lat. by D. R.</th><th>Lat. by Ob.</th><th>Varia.</th><th>Diff. Long.</th><th>Long. in</th><th>Long. by Ob.</th></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table>												Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.										
Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.																						

Ship China

China from Java towards Salem

H.	K.	H.K.	Courses.	Winds	L.W.	Remarks
1	9	10	W 2 N	SSE		Sunday Jan 31 st 1819
2	9	5				Begins with strong br-
3	9					ens and cloudy all neces-
4	9	4				sary sail set.
5	9	4				At 4 P.M. set the main
6	9	6				top gal set.
7	9					At 7.30 P.M. single reefed
8	9	4				a fore and main top
9	9	6				sails.
10	9	6				Middle and lower parts
11	9	4				more moderate, main all
12	9	6				necessary sail.
1	8	6				
2	8					
3	8	5				
4	8	5				
5	8	4				
6	8	6				
7	8					
8	8	4				
9	8					
10	8	10				
11	8	6				
12	8	3				

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
S 43 W	206	100	197		28:43	22	223	35.53	

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	6		West.	SSE		Monday Dec 5 th 1819
2	6	6				Ship these twenty four
3	7					hours under all necessary
4	7	4				sail the weather being
5	8					fine and pleasant.
6	8					
7	8					
8	8	4				
9	8					
10	8	5				
11	7	5				
12	7					
1	6	4				At 4.43 A.M. the varia-
2	6					tion per arm was 25 23 W.
3	6	6				
4	6	6				
5	7	5				
6	6					
7	8					
8	6	5				
9	7					
10	7	4				
11	7	4				
12	8					

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
S 65 W	175	74	159	29.57		25	182	32.57	

Hiram Putnam Master

China from Looe towards Salem

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	8	2	W 3/4 S	South		Begins with good breezes and pleasant.
2	8					
3	8					
4	8	6				
5	8	6				
6	8	6				
7	8					
8	8					
9	8	4				
10	8	4				
11	8	3				
12	8					
1	6	5		SSE		Middle part moderate breezes and squally attended with small rain. Variation per az ^m 26.36 At 6 A.M. set fore top mast studding sail and main top gal studding sail Ends pleasant all necessary sail set
2	6					
3	6					
4	6	4				
5	6					
6	6	3				
7	6	4				
8	7					
9	7					
10	6	0				
11	6					
12	6					

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
53	172	104	137	31.41	31.41	26	158	30.13	

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	6		W 3/4 S	SSE		Begins with moderate breezes and pleasant all necessary sail set.
2	6					
3	6	3				
4	6	4				
5	6					
6	6					
7	6	4				
8	7					
9	7	5				
10	7	6				
11	7	6				
12	7	4				
1	7	4				Middle part strong breezes and pleasant. At 4 A.M. set the starboard studding sails and look fore and main top gal sails Ends pleasant all sail set advantage.
2	7	6				
3	8					
4	8	4				
5	8					
6	8					
7	8	2				
8	8					
9	8	4				
10	8	4				
11	8	6				
12	8	6				

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
54	180	106	146	33.20		30	172	27.21	

Ship China

China from Java towards Palembang

H.	K.	H.K.	Courses.	Winds	L. W.	Remarks
1	8	2	N 2 S	E S E		Thursday Feb 4 th 1879
2	8	2				Begins with strong bree
3	8					zes and heavy. At 5 P.M.
4	7	0		N E S E		took in studding sails & trim
5	5	0				ed the yards. At 7 P.M.
6	5		S W	N N W		single reefed the top sails
7	5		S S W	N S E		at 10 latched ship to the N
8	5	5		Variable		and W at 10 30 took in top
9	5	5				gal sails and reefed the spr
10	5	5				aker. At 10 30 M let a
11	5	5	N E W			reef from the top sails and
12	5	0				set the stunsails.
1	3					ends moderate
2	3		N N W			
3	3					
4	3		N N W			
5	2					
6	2		N N W			
7	3					
8	3					
9	3	4				
10	4		N N W			
11	4					
12	5		N N W			

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
67	75	33	07	33 59		30	80	26 01	

H.	K.	H.K.	Courses.	Winds.	L. W.	Remarks
1	7		N 2 N	S S E		Friday Feb 5 th 1879
2	7	4				First part good breezes &
3	7	4				pleasant all necessary sail
4	7	5				set.
5	7	5		S E		
6	7					
7	7	0				
8	8					at 8 P.M. fresh breezes and
9	8					passing squalls, took in the
10	7	5		South		light sails.
11	15					
12	5					
1	6		N 13 N	S N E		At 4 A.M. saw a ship
2	6			variable		to windward.
3	5	4				
4	5	4				
5	5					
6	5					
7	0					
8	7		N 13 N			Latter part fresh breezes &
9	7	4	N 13 N			passing clouds.
10	7	0	N 2 N			
11	7	0				
12	7	0				

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
64	108	74	150	35 13		28	181	23	

Hiram Putnam Master

China from Java towards Salem

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	8		WNW	SE		Commences with strong
2	8					breezes and squally. At 1.30
3	8	5		South		P.M. took in all the light
4	8					sails. At 7 P.M. set the
5	8	6		SE		Royals and fore top mast
6	8	6				studing sail.
7	8	5				Middle part steady bree-
8	8					zes set the fore royal and
9	8	6				lower studing sail.
10	8	6				Ends pleasant maid all sail
11	8	4				from 6 to 8.
12	8	4				
1	8	2				
2	8					
3	8					
4	8					
5	8					
6	8	4				
7	8	4				
8	8		SW	SE		
9	8					
10	8					
11	8					
12	8					

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
SE	180	22	188		55 41	50	22 3	10 29	

A.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	8	6	SW	SE		Begins with strong bree-
2	8	6				zes and pleasant all necessary
3	9					sail set.
4	9	4				At 7 P.M. strong breezes and
5	9					clouds took in top gal stud-
6	9					ing sails At 8 P.M. in
7	9					larboard main top mast stud-
8	9					ing sail.
9	10	4	NW	SE		Middle and latter parts
10	10	6				strong breezes & pleasant and
11	10					long following sea.
12	10					
1	10					
2	9	6				
3	10					
4	10					
5	10					
6	9		NW			
7	9	5				
8	9					
9	9	5				
10	9					
11	9	4				
12	9	6				

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
SE	227	82	205	34 25		25	25 0	15 15	

Ship China

China from Java towards Salem

H.	K.	H.K.	Courses.	Winds	L. W.	Remarks
1	9	6	WNW	SE		Feb 8 th 1819
2	9	3				
3	9	4				
4	9			South		Begins with fresh gales
5	9	6				and puffing squalls, and
6	9	6				a large following sea.
7	9	5				
8	9					
9	9	4		SE		
10	9	6				Middle part strong breezes
11	9	6				and small squalls of
12	9	4				rain.
1	9	2				
2	9					
3	10					
4	10					
5	9	6				Latter part strong breezes.
6	9	6				Note I suppose the current
7	9	6				to have set her 10° to the Westward
8	9	6				
9	9	4	WNW			
10	9					
11	9					
12	9					

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
N 53° E	228	137	182	32.08	32.12	25	21	1138	

H.	K.	H.K.	Courses.	Winds.	L. W.	Remarks
1	10		WNW 2W	SE		Feb 9 th 1819
2	10					
3	10					Commences with strong
4	9	6				breezes and cloudy with sm
5	9	4				all squalls of rain.
6	9	4				
7	9	6				
8	10					
9	9	6				Middle part strong breezes
10	9	6				and rain.
11	9	4				Variation per am 23.46
12	9	4				
1	9	6				
2	9	6				
3	9	4				
4	8	5				
5	9					
6	9					
7	9					
8	9					Ends cloudy.
9	8	4				
10	8	4				
11	8	4				
12	8	4				

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
N 50° E	222	130	179	30.02		24	229	8.09	

Hiram Putnam Master

China from Java towards Salem

H.	K.	H.K. Courses.	Winds.	L.W.	Remarks
1	2		NNW 2 W	SSW	Feb 10th 1819 ~
2	9				All sail expanded that will draw the weather being fore and pleasant.
3	8	3			
4	7	0			
5	8	2			
6	8	4			
7	8	6			
8	8	4			Middle part moderate breezes and a smooth sea.
9	7	4			
10	7	4			
11	7				
12	7				At 7.30 A.M. the variation was 22.06 West Ends pleasant.
1	7	5			
2	7				
3	6	5			
4	7				
5	6	4			
6	6				
7	5	4			
8	4				
9	5	4	WBS		
10	5	5			
11	4	5			
12	4				

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
N 50 W	166	10 7	12 7	28.15	28.16	22	145	5.44	

H.	K.	H.K. Courses.	Winds.	L.W.	Remarks
1	6	2	NNW 2 W	SS E	Feb 11th 1819 ~
2	6	2			Begins with moderate breezes and fine weather all sail set to advantage.
3	6	4			
4	6	4	SE 3 E		
5	6	4			
6	6	6			
7	7	4			
8	7	6			Variation at 8.21 West. 20.54
9	7	6			
10	7	6			
11	7				
12	6	6			Middle and latter parts moderate breezes and pleasant all sail set to advantage
1	6	6			
2	6	4			
3	6	4			
4	6	6			
5	7	5			
6	7	5			
7	7				
8	6	6			
9	5	6			
10	5	5			
11	5	4			
12	5				

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
N 50 W	158	9 9	110	36 37		21	123	3.41	

Ship China

China from Java towards Salem

H.	K.	H.K.	Courses.	Winds	L.W.	Remarks
1	7	4	NW ² W	W 138		Feb 12 th 1819
2	7	6				Beginns with moderate
3	8					breezes and fine weather
4	8	4		WSW		
5	7	6				all necessary sail set
6	7	6		SW		at 2 P.M. set fore and
7	8	6				main top gal. standing sails
8	8					At 1 A.M. set lower and
9	8	4				main top mast standing
10	8	4				sails
1	7	4				At 3 A.M. set starboard M
2	6	5		South		top gal. standing sail.
3	6			SE		At 4 jibed Ship.
4	7			SE		Ends pleasant.
5	7	4		SE 138		
6	7	4		and variable		
7	6	6				
8	6					
9	6					
10	5					
11	5	5				
12	6					

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
N 47° W	157	119	127	24 38	24 45	20	140	2 21	

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	6	2	NW ² W	SE		Feb 13 th 1819
2	6	2				Commences with light
3	6	4				breezes and pleasant all sail
4	6	4		SE 138		set to advantage.
5	6	4				At 8 P.M. took in star-
6	6	6				board standing sails.
7	7	4				Variation per azm 20.10 W.
8	7	6				Ends light breezes and
9	7	6				pleasant.
10	7	6				
11	7	6				
12	6	6				
1	6	6				
2	6	4				
3	6	4				
4	6	6				
5	7					
6	7					
7	7					
8	6	6				Note) I suppose the ship has
9	5	6				gone to the W of course for which
10	5	5				I allow 3°
11	5	4				
12	5					

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
N 50° W	157	100	120	23.05		20	130	00 04	test

Kiram Putnam Master

China from Java towards Salem

H.	K.	H.K. Courses.	Winds.	L.W.	Remarks
1	4	SWW 2 W	SSE		Feb 14. th 18 19 ✓
2	4				Commences and ends with fine breezes and pleasant all sail expanded that will draw.
3	4	6			
4	5		SE. and variable		
5	6				
6	6	4			
7	6				
8	6	4			
9	6	6			
10	6	4			
11	6	4			
12	6	4			
1	7				Variation per az ^m 19° 36'.
2	7	6			
3	6	6			
4	6				
5	6				Note, I allow her to have gone 3° to the Westward of her course.
6	6	4			
7	6	6			
8	6				
9	6		SSE		
10	6	6			
11	6	4			
12	6	4			

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
N 50 W	146	93	112	21.32	21.40	20	121	2.12 West	

H.	K.	H.K. Courses.	Winds.	L.W.	Remarks
1	6	SWW 2 W	SSE		Feb 15 th 18 19 ✓
2	6	4			Ship under all sail before the wind. Variation per az ^m 19° 18' West At 10 P. M. Look in top gal's sails Middle part fresh breezes and squally. At 6 set top gal's sails Latter part fresh breezes & pleasant. Note) I allow 4° today Westward
3	7				
4	7				
5	7				
6	7	6			
7	8				
8	8				
9	7	6			
10	7	7			
11	8				
12	8	5			
1	8	4			
2	8				
3	8				
4	8				
5	8				
6	8	4			
7	7	4			
8	7	4			
9	7	6			
10	7	6			
11	7	4			
12	7	4			

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
N 50 W	183	117	140	19.43		19	149	4.41	

Ship China

China from Java towards Salem

II.	K.	H.K.	Courses.	Winds	L.W.	Remarks
						Feb 16 th 1870.
1	~	4	NW 1/2 W	SE		Begins with strong breezes and pleasant all sail wanted that will draw. At 3 P. M. set the spanker and fore and mizen top gal sails.
2	~	4				
3	~	4				
4	~	4		SE		
5	~	4				
6	~	4				
7	~	4				
8	~	4				
9	~	6				
10	~	6				
11	~	6				
12	~	6				
1	~	4				Middle and latter parts fine breezes and pleasant. Variation per azimuth 18° W
2	~	4				
3	~	6				
4	~	6				
5	~	4				
6	~	4				
7	~	4				
8	~	6				
9	~	6				
10	~	4				
11	~	6				
12	~	6				

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
N 50 W	170	109	130		18.02	18	138	6.59	

II.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
						Feb 17 th 1870
1	6	4	NW 1/2 W	SE		Commences with moderate breezes and pleasant all sail set before the wind. At ~ P. M. set the sky sail.
2	5					
3	6					
4	6					
5	5	6				
6	6					
7	6					
8	6					
9	5	~				
10	5	6				
11	5					
12	5					
1	4	4	NW 1/2 W			Middle and latter parts fine breezes and pleasant Note she has gone to the S for which I allow.
2	4					
3	4					
4	4					
5	4	5				
6	4					
7	5					
8	5			South		
9	5					
10	5	4				
11	5	6				
12	6					

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
N 54 W	130	~	104	16.45		17	109	8.48	

Hiram Putnam Master

China from Java towards Salem

H.	K.	H.K. Courses.	Winds.	L.W.	Remarks
1	5	NW 2 N	SE		Begins with fine breezes and pleasant all sail expanded before the wind.
2	5				
3	6				
4	6				
5	6				
6	6				
7	6	NW 2 N			
8	6				
9	6				
10	6				
11	5				
12	5				Middle and latter parts fine breezes and pleasant
1	4				
2	4				
3	4				
4	4				
5	4				
6	5				
7	5				
8	6				
9	5				
10	5				
11	4				
12	4				

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
55	129	74	104		15 30	16 15	108	10.36	

H.	K.	H.K. Courses.	Winds.	L.W.	Remarks
1	4	NW 2 N	SE 158		Commences with fine breezes and pleasant all sail expanded before the wind.
2	4				
3	4				
4	4				
5	5				
6	4				
7	4				
8	4				
9	5				
10	5				
11	4				
12	5				Middle and latter parts fine breezes & pleasant
1	4				
2	4				
3	4				
4	4				
5	4				
6	4				
7	4				
8	4				
9	4				
10	4				
11	4				
12	4				

Course	Dist	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
N 55 E	104	59	85	14.31		10	88	12.06	

Ship China

China from Java towards Salem

B.	K.	H.K.	Courses.	Winds	L. W.	Remarks
1	4		NW B W	SE B E		Feb 20th 1870
2	4					Begins with moderate breezes and fine weather all necessary sail made.
3	4					
4	4					
5	3	6				
6	3	6				
7	3	6				
8	4					
9	4					
10	3	4				
11	3					
12	3					Middle and latter parts light breezes and clear pleasant weather. People employed in painting the ship.
1	4					
2	4					
3	4					
4	3	4				
5	3					
6	3	2				
7	3					
8	3					
9	3					
10	3					
11	2	5				
12	2					

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
152	85	51	68	13.46		15	71	73.17	

H.	K.	H.K.	Courses.	Winds.	L. W.	Remarks
1	2		NW B W	SE B E		Feb 21st 1870
2	2					Commences and ends with light breezes and pleasant all sail set People employed in painting the ship.
3	3	5				
4	3	5				
5	3	4				
6	3					
7	4	4				
8	4	4				
9	4					
10	4					
11	4					
12	4	5				
1	4	6				
2	4	6				
3	5					
4	5					
5	5	4				
6	5					
7	5					
8	5					
9	5					
10	5	3				
11	5	2				
12	5					

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
146	103	70	73		12 29	14	75	14.32	

Hiyam Putnam Master

China from Java towards Salem

H.	K.	H. K.	Courses.	Winds.	L. W.	Remarks	Feb 22d. 1819.				
1	4	7	NWBN	SEBS		Ship under all sail that will draw the weather being clear and pleasant.					
2	4										
3	5	4									
4	4	4									
5	5										
6	5										
7	5										
8	5	5									
9	5	5									
10	5	6									
11	6					Middle and latter parts fine breezes and pleasant. People employed in painting the ship.					
12	6										
1	4	5									
2	5										
3	5										
4	4										
5	4	6									
6	5										
7	5										
8	5										
9	5										
10	6										
11	5										
12	5	5									
Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.		
N 49 W	123	80	02		12.10	14	95	16.07			

H.	K.	H. K.	Courses.	Winds.	L. W.	Remarks	Feb 23d 1819.				
1	5	4	NWBN	SEBS		Commences with moderate breezes and fine pleasant weather. all necessary sail set. People employed in painting the ship.					
2	5	4									
3	5	4									
4	5	4									
5	5										
6	5	5									
7	5										
8	5										
9	5										
10	5										
11	5	6				Middle and latter parts moderate breezes and pleasant					
12	4										
1	4	5									
2	4	5									
3	4	4									
4	4	4									
5	4	4									
6	5										
7	6										
8	6										
9	5										
10	5	4									
11	5	4									
12	5	4									
Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.		
N 56 W	122	68	94	9.52		13	46	17.43			

Ship China

China from Java towards Salem										
G.	K.	H.K.	Courses.	Winds	L.W.	Remarks	Feb 24 th 1879			
1	5		NWBN	SEBS		Begins with fine and pleas and weather and light breezes, all necessary sail set				
2	5	6								
3	4	6								
4	5									
5	5									
6	5									
7	5									
8	5									
9	5									
10	5	4								
11	6									
12	6									
1	5	5	NW2N			People employed in paint- ing the ship.				
2	5									
3	5	6								
4	5	6								
5	5	6								
6	5	6								
7	5	6								
8	6	6								
9	6									
10	6									
11	5									
12	6	5								
12	6	5								
Course. Dist. Diff. Lat. Dep. Lat. by D. R. Lat. by Ob. Varia. Diff. Long. Long. in Long. by Ob.										
N49W 131 86 99 8.26 13 100 19.23										

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks	Feb 25 th 1879			
1	6		NWBN	SEBS		Commences with fine breezes and pleasant weat- ther all necessary sail set. Variation 12° 38' West.				
2	6									
3	6									
4	5	6								
5	5	6								
6	5									
7	5									
8	5									
9	5	6								
10	6									
11	6									
12	5									
1	5	4				Middle part squally with rain; took in the M. royal & larboard slid- ing sails. At 5 set royals spraker man sail &c. Ends pleasant.				
2	6									
3	7									
4	7									
5	6		NW2N							
6	6									
7	4	5								
8	4									
9	4									
10	4	5								
11	4	5								
12	5									
12	5									
Course. Dist. Diff. Lat. Dep. Lat. by D. R. Lat. by Ob. Varia. Diff. Long. Long. in Long. by Ob.										
N48W 130 86 96 7.11 13 97 21.00										

Hiram Putnam Master

China from Java towards Salem											
H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks Feb 26 th 1819					
1	6		NWBN	SEBS		Commences with fine breezes and pleasant weather all sail set before the wind					
2	6										
3	6										
4	5	6									
5	5	6									
6	5										
7	5										
8	5										
9	5	6									
10	6										
11	6										
12	7										
1	5	4				Middle and latter parts fine breezes and pleasant. Variation per azimuth 11° 10 West.					
2	6										
3	6										
4	5										
5	6										
6	6										
7	4	5									
8	4										
9	4										
10	4	5									
11	4	5									
12	5										
Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.		
N 47° W	128	86	93		5.50	11	94	22 30			

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks Feb 27 th 1819					
1	4		NWBN	SEBS		This day commences and ends with fine and pleasant breezes and a smooth sea; all sail executed before the wind. Variation per az ^m 8° 40 West.					
2	4	4									
3	4	4									
4	4										
5	4										
6	4										
7	5	6									
8	5	4									
9	6										
10	6										
11	6										
12	6	4									
1	6	4				SSE					
2	6	6									
3	5										
4	5										
5	6										
6	6										
7	6	3									
8	6										
9	6	3									
10	6										
11	7										
12	7										
Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.		
N 50° W	133	83	100		2.02	8.40	100	27.20			

Ship China

China from Java towards Salem

H.	K.	H.K.	Courses.	Winds	L.W.	Remarks
1	5	5	NW 3/4 N	SE 1/4 S		Commences with moderate breezes and pleasant weather all sail set before the wind. At 1 P.M. set the fore top gal sail.
2	5					
3	6					
4	6					
5	5					
6	4	5				
7	4					
8	4					
9	4	5				
10	4	6				
11	4	6				Middle and latter parts fine breezes and pleasant. Variation per azm 900 West.
12	5	6				
1	5		NW 3/4 N			
2	5					
3	5					
4	5					
5	5					
6	5					
7	5					
8	5					
9	4					
10	4	6				
11	5	6				
12	5					

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
N 45° W	119	84	84		3.22	9	85	25.46	

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	4		NW 3/4 N	SE 1/4 S		Ship under all sail the day the weather being pleasant. Variation per azm 8.40 West.
2	4	4				
3	4	4				
4	4					
5	4					
6	4					
7	5	6				
8	5	6				
9	6					
10	6					
11	6					
12	6	4				
1	6	4				SE 1/4 E
2	6	6				
3	5					
4	5					
5	6					
6	6	3				
7	6					
8	6					
9	6	3				
10	6					
11	7					
12	7					

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
N 50° W	133	83	100		2.02	9	100	27.26	

Hiram Putnam Master

China from Java towards Salem

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	^m		NWBY	SEBE		Mar 2 d. 1819 ~
2	10					Moderate breezes and pleas
3	5	5				ant weather and a smoothe
4	5	6				sea all sail expanded from
5	5					the commencement to the end
6	5	6				and of the day.
7	5	6				
8	5					
9	5	m				
10	6					
11	6					
12	5	6				
1	5	6				
2	6					
3	6					
4	5					Variation per azimuth 7.38
5	5	6				West.
6	4					
7	5					
8	5					
9	5	0				
10	6					
11	6					
12	6					

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Jo.
N 41 W	134	98	95	00.245		8	95	29.07	

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	5	6	NWBY	ENE		Mar 3 d 1819 ~
2	5	6				Commences with brisk br
3	6					ees and passing clouds, all
4	6					necessary sail set.
5	5	5				Variation 6 West.
6	5					
7	6	6				
8	6	4				
9	6					
10	5	5				
11	5					
12	5					Middle part squally
1	5					with rain.
2	5					
3	4	6				
4	3					
5	2			ESE		
6	4			ENE		
7	5					
8	5					Latter part light bree
9	4	4				zes & passing clouds.
10	4					
11	3					
12	2					

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Jo.
N 40 W	115	88	72			40.86	72	30.13	

Ship China

China from Java towards Solum

No.	K.	H.K.	Courses.	Winds	L.W.	Remarks
1	4		NW by E	East-		Mar. 4th 1819.
2	4					Commences with light
3	4					breezes and cloudy weather
4	4					
5	4	4				all necessary sail set
6	4	0				
7	5	0				
8	4	4				
9	4					
10	4	4		S.E.		Middle part squally took
11	0					in the main sail.
12	0					
1	5					
2	5					
3	5	0				
4	4	0				
5	4	0				
6	4	0				Ends pleasant breezes and
7	0					pleasant weather.
8	5	4				
9	4	0				
10	5					
11	5					
12	5					

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
436	118	42	4		2 50	0	4	31.2	

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	ny		NW by N	N E	2°	Mar. 6th 1819.
2	ny					Begins with fine breezes
3	0	0				and smooth weather all ne
4	0	0				cessary sail set.
5	ny					
6	0	0				At 5 P.M. took in the roy-
7	ny	4				als and mizen top gal. sails
8	ny	0				
9	0	0				
10	ny	5				
11	0	5				
12	ny	5				
1	8					Middle and latter parts
2	8	4				strong breezes and good we-
3	8	0				ather.
4	8	0				
5	ny	0				At 5 A.M. set mizen top
6	8					gal sail.
7	8					
8	8					
9	8	4				
10	8	0				
11	8	0				
12	8	0				

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
43	283	134	125	4.20		0	120	33.33	

Hiram Putnam Master

China from Java towards Salem

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	8		NW 3/4 N	NE	3	Commences with fresh breezes and passing clouds all necessary sail set Variation per am 2 54 West
2	8	4				
3	8	4	NW 1/2 N			
4	8					
5	8	4				
6	8	4				
7	8	6				
8	8	6				
9	8	6				
10	8	4				
11	8	4				
12	8	4				
1	8					Middle and latter parts strong breezes and passing clouds Note I find there is a current setting S 1/2 W in which I allow 1 45 1/2
2	8					
3	8					
4	8					
5	8					
6	8	4		NE 1/2 N		
7	8					
8	8	4				
9	8					
10	8					
11	8					
12	8					

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
N 50 W 197	126	151			6 26	5	152	36.03	

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	8		NW 1/2 N	NE 1/2 N	3	Comes in with strong breezes and passing clouds. Middle part strong breezes and passing squalls At 9 P.M. reefed mizen top sail and set the fore and mizen top gal sails Ends cloudy weather. Note) I allow S 45 W as yesterday
2	8	4				
3	8	4				
4	8	4				
5	8					
6	8					
7	8	4				
8	8					
9	8	5				
10	8	5				
11	8	5				
12	8	5				
1	8	6				
2	8	6				
3	8	6				
4	8	6				
5	8	4				
6	8	5				
7	8	5				
8	8	4				
9	8	4				
10	8	4				
11	8	4				
12	8	4				

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
N 49 W 199	131	151	8.38			2	154	38.37	

Ship China

China from Java towards Salem

H.	K.	H.K.	Courses.	Winds	L. W.	Remarks
1	8	5	NW	NEB N 3°		Mar. 8 th 1819.
2	8	5				Commences with fresh
3	8	5				breezes and cloudy weather
4	8					all necessary sail set.
5	8	4				
6	8	4				
7	8	4				
8	8					
9	8	4				
10	8	4				At 1 P.M. set the main
11	8	2				royal, flying jib and m-
12	8					in top gal staysail.
1	8					
2	8	6				
3	8					
4	8					
5	8					
6	8	4				
7	8	2				
8	8	4				Ends with fine breezes
9	8					and cloudy.
10	8					
11	8					
12	8					

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
N 50° W	197	127	151	10.45	10.50	2	153	41.10	

H.	K.	H.K.	Courses.	Winds.	L. W.	Remarks
1	8	3	NW	NEB N 3°		Mar. 9 th 1819.
2	8	3				Begins with fresh bree-
3	8	4				zes and passing clouds. all
4	8	4				necessary sail set.
5	7	6				
6	7	6				
7	8					
8	8	3				
9	8					
10	8					Middle part fresh bree-
11	7	6				zes and passing clouds.
12	7					At 1 P.M. took in the roy-
1	8					als and flying jib.
2	8					At 9 A.M. set the royals
3	7	6				and flying jib.
4	7					
5	8	5				
6	8					
7	8					
8	8	3				
9	8					
10	8	4				Ends with fine breezes
11	8	6				& passing clouds.
12	8	6				

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
N 50° W	193	124	148		12.52	2	151	43.41	

Hiarn Putnam Master.

China from Java towards Salem

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	8	4	NW	NEBE	3'	Comes in with fresh breezes pleasant weather and passing clouds, all necessary sail set. At 2 P M took in royals and flying jib
2	8					
3	8					
4	8					
5	7	6				
6	8					
7	7	6				
8	7	6				
9	7					
10	7	6				
11	8					
12	7	6				
1	7					Middle and latter parts moderate breezes and pleasant all necessary sail set.
2	6					
3	6					
4	6					
5	5	6				
6	5	6				
7	5	4				
8	5	4				
9	6	5				
10	6	5				
11	6	5				
12	6	5				

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
N 48° W	108	112	125	14.44		00	129	45.58	

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	6	4	NW	NEBE		Begins with moderate breezes and pleasant weather all necessary sail set. Midnight light airs & clear.
2	6	4				
3	6	6				
4	6	6				
5	5					
6	4	5				
7	4	4				
8	4	4				
9	5					
10	4					
11	4	5				
12	3	5				
1	3					Ends with light airs & warm.
2	3					
3	1	5				
4	0	5				
5	2					
6	2					
7	2					
8	2					
9	2					
10	2					
11	1					
12	1					

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
N 50° W	85	54	65		15.34		68	46.58	

Ship China

China from Java towards Salem

H.	K.	H.K.	Courses.	Winds	L.W.	Remarks
1	1	1	NWBN	Variable		Comes in with light air and variable, took in all the light sails sle ing
2	1	1	NW			
3	1	1	NW			
4	1	1	North			
5	2		North			Middle part light breeze and pleasant
6	2					
7	2					
8	2					
9	2		NBW			At 1.30 A.M. tacked ship to the S & W.
10	2		NBW			
11	2	6	NWBN			
12	2					
1	4					Variation per az ^m 00° 12' East Ends with moderate br eers and pleasant all nee spary sail set.
2	4					
3	4					
4	3					
5	1		due S			
6	2		NW			
7	2					
8	2					
9	2	5	N 2 E			
10	2					
11	2		NNW			
12	2					

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
N 50 W	32	16	27		15 47 00.12	28		47 24	

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	4	4	NWBN	Variable		Begins with light win ds and pleasant.
2	4	4				
3	5					
4	5					
5	3		NBE			At 4 P.M. saw a sail in to the Northward, stan ding to the Southward.
6	2		NNE			
7	1		due N			
8	1	4				
9	1	4				Midnight calm.
10	0					
11	0					
12	0					
1	0					At 6 A.M. a light air from the S. set lower top mast & top gal stuff sail.
2	0					
3	0					
4	0					
5	0					Ends moderate & pleasant
6	0					
7	2		NW			
8	4	5				
9	5					
10	5					
11	4	6				
12	4	6				

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
N 36 W	50	40	29		16 19 00.12	30		47 54	

Hiram Putnam Master

China from Java towards Salem

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	4		NW 3/4 W	Variable	3"	Mar. 14 th 1819
2	4		NNW			Begins with light bree-
3	4		N 1/2 W			zes and pleasant. all reefs
4	4	4	NNW 3/4 W	West		any sail set
5	4	4				At 1 P.M. took in all the
6	4	4				light sails.
7	4					Middle part light airs &
8	3	5				pleasant
9	3	4				At 4 A.M. set all set stud-
10	3	4				ing sails on the larboard side
11	3					
12	3					
1	3		NW 3/4 W			
2	3	5				
3	3	5	NW 3/4 W			
4	3	6				
5	3	6				
6	3					
7	3					
8	4	4				
9	3	5				
10	2	5				Ends pleasant.
11	2	5				
12	2	5				

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
N 28 W	83	3	40		17 27	1	42	48 38	

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	2		NW 2 N	WSW	00	Mar. 15 th 1819
2	2	3				Begins with light airs
3	2					and clear. all drawing sails
4	2					set.
5	1					
6	1					
7	1					
8	0		calm			
9	0					
10	0					Middle part clear and
11	0					pleasant.
12	0					
1	0					At 3 A.M. a light air from
2	0					NE.
3	0					
4	2		NW NE 1/2 N			
5	1	5				
6	1	5				
7	1	5	NW NE 1/2 N			
8	2					Ends light breezes and
9	2					pleasant.
10	2	3				
11	2	3	NW WSW			
12	2					

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
N 42 W	30	22	20		17 39	1°	21	48 59	

Ship China

China from Taru towards Sulem

H.	K.	H.K.	Courses.	Winds	L.W.	Remarks
1	2		NW 1/2 N	SE	5	<p>Begins with light airs and pleasant all sail set to advantage.</p> <p>At 1 P.M. took in the lower standing sail.</p> <p>Middle part moderate and breezes and pleasant.</p> <p>At 7 A.M. squally took in the light sails.</p> <p>At 8 A.M. steady breezes and pleasant to the end of the day.</p>
2	2					
3	2					
4	2			East and variable		
5	2	4				
6	2	4				
7	2					
8	2					
9	3					
10	3					
11	3	4				
12	3					
1	3	5				
2	3					
3	3					
4	2					
5	2	5				
6	2	4				
7	2	4				
8	2	4				
9	5	3				
10	6					
11	6					
12	6					

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
N 40 E	72	55	46		18.38	1	48	49 47	

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	6	4	NW 1/2 N	NE B N		<p>Commences with fresh breezes and cloudy, all sail set by the wind.</p> <p>At 8 took in the royals and flying jib.</p> <p>Middle part fresh breezes and pleasant.</p> <p>Ends fine breezes and pleasant.</p>
2	6	4				
3	6	3	NW 1/2 W			
4	6	3				
5	6		NW 1/2 N			
6	6					
7	6		NW			
8	7					
9	7	4	NW 1/2 N	NE B N		
10	7					
11	7					
12	7					
1	7	4				
2	7	6				
3	8					
4	8					
5	8					
6	8					
7	8					
8	8					
9	8	4				
10	8	6				
11	9	6				
12	9	4				

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
N 45 W	178	118	131		20.33	1	139	52 16	

Hiram Putnam Master

China from Java towards Salem

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	8	5	NWBN	NE		Mar 18th 1819
2	8		NWBN	NE		Begins with strong bree-
3	7	6				zes and squally all necessary
4	7	6				sail set.
5	8					At 4 P.M. took in fore and
6	8					M. top gal standing sails.
7	7	6				Middle part strong breezes
8	7	6				and passing clouds.
9	7					At 1 A.M. set top gal and
10	6	4				lower standing sails.
11	6	4				Ends moderate breezes and
12	6	6				pleasant.
1	6	6		ENE		
2	6	6				
3	6	6				
4	7			NEBN		
5	7					
6	7					
7	7	4				
8	7	4		NE		
9	6	6				
10	7					
11	7					
12	6	6				

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
NB 4	164	136	92		22.46	1°	99	54 55	

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	6	6	NWBN	NE		Mar 19th 1819
2	6	4				Begins with fresh breezes &
3	6	6		NEBN		passing clouds
4	6					Variation per compass 38 West.
5	4	5		ENE		
6	6			NE		
7	8					
8	8					
9	7	5		NEBE		Middle part moderate and
10	7	5				pleasant.
11	7					At 6 A.M. saw a Brig ^t
12	6	5				standing to the Northward
1	6	4				
2	6	4				
3	5	4				
4	5					
5	6			ENE		
6	6					
7	7					
8	6	5				Ends moderate breezes and
9	6					pleasant.
10	6					
11	6	4				
12	6	4				

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
NB 4	156	129	87		24.47	1°	95	56.39	

Ship China

China from Java towards Salem

Li.	K.	H.K.	Courses.	Winds	L.W.	Remarks
1	6	5	NWB N	East		Commences with strong trade winds and pleasant weather all necessary sail set.
2	6	5				
3	6	4				
4	6	4				
5	6	4				
6	6	5				
7	5	5				
8	6	5				
9	6	5				
10	6	5				
1	6	5	NWB N	East		Middle part strong breezes and cloudy. At 9 A.M. saw a sail standing to the Northward. Ends fine breezes and pleasant.
12	6	5				
1	6	5				
2	5	3				
3	5	3				
4	5	6				
5	4	6				
6	4	4				
7	4	4				
8	5	5				
9	7	5	NWB N	East		
10	6	5				
11	5	5				
12	5	5				

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
N 36 W	140	113	81	.	.	26.38	1	91	58.01

Li.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	4	6	NWB N	East		Begins with fine breezes and very warm, all necessary sail set. Variation per azm 1.50
2	4	6				
3	5	4				
4	6	4				
5	7	4				
6	6	6				
7	7	4				
8	7	4				
9	6	6				
10	6	6				
11	6	6	SEB S	East		At 6 A.M. saw a ship standing to the Northward. At 10 A.M. set the main top mast and lower studing sail. Ends with fine breezes
12	6	6				
1	6	6				
2	6	6				
3	6	6				
4	6	6				
5	6	6				
6	6	6				
7	5	5				
8	4	5				
9	4	5	SEB S	East		
10	5	6				
11	6	6				
12	6	6				

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
N 30 W	142	123	71			28.39	2	80	59.21

Giam Putnam Master.

China from Java towards Salem

H.	K.	H.K. Courses.	Winds.	L.W.	Remarks
1	6	NW 1/2 N	SE		Commences with moderate breezes and pleasant all necessary sail set.
2	5				
3	4	5			
4	3	5			
5	3				
6	3				
7	3	5			
8	4				
9	4	9			
10	5				Midnight light winds & cloudy.
11	5				
12	4				
1	3	4			Ends with light winds and pleasant. the wind hauling to the westward took in all the starboard standing sails.
2	3	4			
3	3	4			
4	4				
5	3	4			
6	3	4	SW		
7	3	4			
8	3				
9	4				
10	4				
11	4				
12	4				

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
N 29° W	196	77	58	29.56		3	67	60.28	

H.	K.	H.K. Courses.	Winds.	L.W.	Remarks
1	4	NW 1/2 W	W 1/2 W	20	Comes in with fine fine weather. At 2 P.M. fresh breezes in standing sails royal & flying jib. At 5 P.M. the wind hauled to the NE in top gal sails and tacked ship to the NW double reefed the top sails and down royal yards. At 7 close reefed T sails & hauled the jib & M sail.
2	4	NW 1/2 W	variable		
3	5	N 1/2 W			
4	5	N			
5	5	N 1/2 E			
6	4	NW 1/2 W			
7	5	NW 1/2 W			
8	4				
9	3	N 1/2 W			
10	3				
11	4	NW 1/2 NE 1/2 N			
12	4				
1	4				
2	4				
3	4	6			
4	3				
5	4				
6	3				
7	3				
8	4				
9	3	4			
10	4	6			
11	4				
12	5	5			

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
N 42° W	111	82	74	31.17			86	61.54	

Ship China

China from Java towards Salem

H.	K.	H.K.	Courses.	Winds	L.W.	Remarks
1	5	4	NW	NW	12	Begins with fresh breezes and cloudy with a heavy sea.
2	5	2				
3	5	2	NB			
4	6					
5	4	4	NB			
6	5					
7	5	5				
8	5	5				
9	5					
10	4	4				Midnight light airs from the S.E.
11	4			SE		
12	3					
1	2					At 3 A.M. let the reefs from the top sails and set top gal sails.
2	1	4				
3	2	2				
4	2	4				
5	3		NW			
6	4					At 5 A.M. crossed R yards & set all barboard standing sails.
7	5					
8	6					
9	6					
10	5			WB		
11	6					
12	6					

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
N 20 W 107	101	30			32.50	6	43	62.37	

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	6	4	NW	NW	3	Comes in with fresh breezes and passing clouds all necessary sail set. Middle part strong breezes and heavy look in the light sails reefed sparker look in 1 st gal sails and reefed top sails. Latter part pleasant weather all sail set.
2	6	6				
3	7	4				
4	7	6				
5	7					
6	8					
7	8	4				
8	8	6				
9	8					
10	6	4				
11	6					
12	6					
1	5	4				Latter part pleasant weather all sail set.
2	6					
3	6					
4	6					
5	5					
6	1	5				
7						
8	baln					
9	0					
10	2	4				
11	3	2				
12	4	4				

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
N 32 W 127	108	67			34.37	7	80	63.57	

Hiram Putnam Master

China from Java towards Salem

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	7		NW BWS	SW	20	Comes in with strong breezes and passing clouds.
2	8					
3	8					
4	8					
5	7	6				At 2 P.M. took in the royals and flying jib and all the staysails & top gal sails
6	7	4				
7	8					
8	8					
9	7	6				At 6 P.M. double reefed the top sails.
10	8					
11	8					
12	7	6				
1	7					
2	7					
3	6					At 8 P.M. close reefed the top sails reefed M. sail & handed it
4	6					
5	5					
6	4					
7	3		NE	NW		At 12 past 12 reefed fore sail & handed mizen top sail.
8	3					
9	2		WBS			
10	2	5	West			At 6 A.M. down R yards.
11	2					
12	2					

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
N 15 W	124	120	31		36 26	6°	39	64 36	

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	2		NWBS	NWBS		Mar. 27th 1819
2	1	4				Ship under close reefed top
3						
4						Calm. The ships head sails and courses.
5						round the compass.
6	1		NWBS	SW		At 6.30 let 2 reefs from the
7	3	4				
8	5				20	top sails.
9	5	4				
10	7			South		Middle part strong breezes and passing clouds.
11	6	6				
12	6	5				
1	7	4				At 1 A.M. close reefed the top sails.
2	7					
3	6	6				
4	7					
5	3		NE	NW	24	At 3.30 A.M. the wind
6	3					hauled to the NW handed
7	3					M. sail and M. top sail.
8	4					
9	4					
10	4					
11	3	6				
12	3	6				

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
N 15 W	68	65	17		37.29	8	19	64 56	

Ship China

China from Java towards Salem

H.	K.	H.K.	Courses.	Winds	L.W.	Remarks
						Mar. 28th 1819
1	4		N E B N	N W	24	Ship under close reefed topsails.
2	4					
3	3	6	N N E			
4	3	6				
5	3					
6	3	4				At 4 P. M. spoke an Eng-
7	4					lish ship bound to Norfolk
8	3			N W B W		
9	2	Up N B E				
10	2	off N E B N			44	54 days out.
11	2					
12	2			N W		At 6 P. M. reefed fore sail
1	2	Up W S W				and hauled fore and mizen
2	2	off S W				topsails. spanker and fore
3	2					tops mast staysail.
4	2					
5	2					Ends strong gales and he
6	2					avy squalls.
7	2					
8	2					
9	2					
10	2					
11	2					
12	2					

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
S 82 E	32	4	30	37 25		8	37	64 18	

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
						Mar. 29th 1819
1	2	Up W S W		N W B W	46	Begins with strong gales and passing squalls of hail
2	2	off S W				
3	2					
4	2					
5	2					
6	2	Up S W B W				Ship under reefed fore sail
7	2	off S W B W				and close reefed main tops
8	2					sail & mizen staysail
10	2					
11	2					
12	2				24	Middle part strong gales
1	2					and heavy squalls.
2	2					
3	2					
4	2					
5	2	Up W S W				Latter part more moder.
6	2	off S W				
7	2					
8	2	W S W			18	At set the fore & mizen
9	4	S W B W				topsails let a reef from tops
10	4					sails & set the M sail.
11	4					
12	4					

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
S 17 W	52	50	13	a strong current	37 00	8	17	64 35	

Hiram Putnam Master

China from Java towards Salem

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	3		NWB	NWB		Mar. 30. M. 1819
2	3					Begins with light breezes from the N.W.
3	3	5				
4	3	5				
5	3	4				At 4 P.M. let the reefs out
6	2	4				of the top sails and set the
7	1					top gal sails.
8	1	5				
9	4					
10	5		NWB			At 10 P.M. took in top gal
11	6					sails.
12	6					
1	8					Midnight fresh breezes.
2	8			WSW		
3	7	5				At 4 A.M. double reefed the
4	7	5				fore and mizen top sails
5	7	6				
6	7					At 8 A.M. close reefed top
7	7			SW		sails & handed M sail
8	8					
9	8					
10	8					
11	8					
12	8	4				

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
N 48° W	135	108	83	38° 21'	38° 21'	8'	100	66° 21'	

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	8		NWB	SSW		Mar 31 st 1819
2	7	4				Begins with fresh breezes and pleasant.
3	7	2				
4	7	2				
5	8					At 8 P.M. sounded bell for
6	8					and no bottom.
7	8					
8	8					Middle part strong gales
9	8	5				and hazy under close reefed
10	8	5				top sails and reefed fore
11	8					sail.
12	8					
1	8					At 6 A.M. a squall took
2	8					in fore top sail &c.
3	8					
4	8					At 8 A.M. sounded 70 f.
5	7	5		SW		At 10 A.M. sounded 50 f.
6	7	5				
7	5					
8	5					
9	4	5				
10	5					
11	3	5				
12	3					

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
N 43° W	178	130	122	40° 29'	40° 29'	16'	155	68° 56'	

Ship China

China from Java towards Salem

Ft.	K.	H.K.	Courses.	Winds	L. W.	Remarks
						April 1st 1819
1	4		NW 1/2 N	WSW	11	Commences with fine
2	4					breezes and hazy
3	5	4				
4	5					
5	10		NW 1/2 N			
6	10				24	At 10 P.M. double reefed
7	5		N.			top sails reefed M. sail
8	5	4				and handed the jib.
9	5					
10	4	4	NW 1/2 N		33	Middle part fresh breezes
11	4					and cold, sounded every 2 ho
12	4					At 7 A.M. main sail.
1	4					At 10 A.M. set top gal sails.
2	5		NNE			
3	3	4				
4	4	4		NNE		
5	3					
6	3					
7	4		NE		11	
8	4	3	NNE			
9	4					
10	5	4				Ends fresh breez.
11	5					
12	5	5				

Course.	Dist.	Diff Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
					41.29	8			

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						

[illegible]

Thiram Putnam Master

China from Salem towards Gibraltar

H.	K.	H. K.	Courses.	Winds.	L. W.	Remarks
1						First part pleasant breezes and fine weather, but the wind being to the Eastward cannot get under way
2						Middle part cloudy.
3						At 8 A. M. the wind N. W.
4						and a fine breeze.
5						At 9 A. M. Mr. Perkins came on board got under way
6						Ends with fine breeze
7						is. Bakers Island in sight
8						
9						
10						
11						
12						

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.

H.	K.	H. K.	Courses.	Winds.	L. W.	Remarks
1	7		EB S	N. W.		Begins with fine breezes and pleasant
2	7					Thatchers Is-
3	7	5				land N 3 leagues distance.
4	7	5				At 1 set top gal sails and
5	6	8				sent up royal yards and
6	6	8				set standing sails.
7	7	5				At 3 P. M. took in all the
8	7	5				light sails.
9	8					At 7 P. M. double reefed
10	7	6				the top sails.
11	7	5				At midnight took in all sail
12	7	6				Ends strong breezes

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
East	167	00	167		42.20	10	179	67.25	

Ship China

China from Salem towards Gibraltar.

H.	K.	H.K.	Courses.	Winds	L.W.	Remarks
1	7	8	SEBEE	NEW		April 24 th 1819
2	7	5				Commences with strong
3	7	5				gales and clear weather.
4	7	5				At 4 P.M. let a reef from
5	7					the top sails.
6	7					
7	8					
8	8					
9	7	5				
10	7					
11	6	5				Middle part more mod
12	6					erate moid sail accordingly
1	5	5				
2	5	3				
3	5					
4	5					
5	6					Ends fine breezes and
6	7			SW		pleasant all necessary sail
7	7	6				moid.
8	7	4				
9	7	8				
10	7	6				
11	7	5				
12	8					

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
873	167	49	100	41.31		11	172	63.00	

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	8	5	SEBEE	SW		April 25 th 1819
2	8	5				Begins with strong bree
3	8					zes and clear weather with
4	8					a large sea
5	8					At 6.30 P.M. in lower judg
6	8	5				sail
7	8					At 8 P.M. in royals
8	8	5				At 8.30 fore top mast standing
9	8	5				sail and top gal sails.
10	8	5				At 9 P.M. reefed fore and M
11	8	5				top sails & spanker All M.S. sail
12	8			SW		At 10 M hauled M sail spanker
1	8					squared the yards
2	7					
3	7					
4	8					
5	8	5				
6	8					
7	7					
8	8	6				
9	8					
10	8					
11	8					
12	8					

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
873	193	64	209	40 27	40.21	11	276	58.32	

leave of the sep 24

Hiram Putnam Master

China from Salem towards Gibraltar

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	8	2	SEBE	ENE	W	April 26 th 1819
2	8					Comes in with strong
3	8	3				gales and passing squalls
4	8					At 5 P.M. let 2 ^d reef from
5	8					fore top sail. — saw a sail
6	7					standing to the southward
7	7	7				and westward.
8	8					At 6.30 set fore top gal sail.
9	8					Midnight squally with rain
10	7	5				look in fore and main top
11	7					gal sails.
12	8	3				Ends strong breezes and cle
1	7					udy.
2	7	5				
3	6					
4	7	5				
5	7					
6	6					
7	6					
8	5	6				
9	6	3				
10	6					
11	6					
12	5	5				

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Jo.
269 E	173	42	162	39.19	39.19	11	232	54.40	
									Current 20' East

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	5	5	SESE	NEBE	4	April 27 th 1819
2	5	5				Comes in with strong bree
3	5					zes and cloudy weather.
4	5	6	SEBS	EBS		At 2 P.M. more moderate
5	5		SE	East		set the jib let a reef from
6	5		SE	var		the spanker.
7	5		SE			At 10 P.M. close reefed the
8	5		SE			top sails and spanker, fore
9	5		SE			and main sails and handed
10	5		SE			mizen top sail.
11	5		SE			At 12 noon ship to the NBE
12	5		SE			and handed fore top sail.
1	6	5	SE	variable		
2	5	5	SE			
3	5		South	ESE		
4	4					
5	5	5				
6	4	5				
7	4	5				
8	5	5				
9	4		SE		18	
10	3		SE			
11	3		SE			
12	3		SE			

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
220 E	107	100	37	37 39	37 39	26' East	68	53.32	

Ship China

China from Salem towards Gibraltar

H.	K.	H.K.	Courses.	Winds	L.W.	Remarks
1	1	5	Up E N E	SE	40	April 28th 1819
2	1	5	Up E N E			Begin with strong
3	1	5				gales and rainey.
4	1	5				At 6 P.M. sent down
5	1	5				down fore & mizen tops
6	1	5				gal yards
7	1	5				
8	1	5				
9	1	5	Up E N E			
10	1	5	Up E N E			
11	1	5	Up E N E			
12	4	5	E N E	SEW	00	Middle part more mo-
1	4	5				derate set fore and M. tops
2	5					sails
3	6	5		SEW		
4	7	5				
5	8			SEW		Ends fine breezes and
6	8					pleasant ship under sin-
7	8					gle reefed tops sails.
8	7	5				
9	7	6				
10	8					
11	8	3				
12	8					

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
482	42	12	91		38.20	9	130	51.22	

H.	K.	H.K.	Courses.	Winds	L.W.	Remarks
1	8		E N E	SEW		April 29th 1819
2	8					Comes in with moderate
3	7	8				breezes and hazy, sent up
4	8					fore and mizen tops gal
5	7	6				yards.
6	7	3				At 2 P.M. let the reef
7	7	3				from the fore tops sail
8	7	3				& set set fore tops mast
9	7	5				sluicing sail.
10	8					At 5 P.M. sent up M.
11	7	5				tops gal yard.
12	7					
1	7	3		SEW		At 6 A.M. set fore & main
2	7					tops gal sluicing sails.
3	7					
4	7					
5	7	5				
6	7	5				
7	7					
8	7					
9	7					
10	6	3		SEW		
11	6					
12	6	5				

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
482	185	6	185		38.15	9	235	47.27	

Hiram Putnam Master

China from Salem towards Gibraltar

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	6		E.S.E.	S.W.B.S.		April 30 th 1819 ~
2	5	6				Begins with fine bree-
3	4					zes and pleasant all necefs-
4	3	5				ary sail set.
5	2	5				
6	3					
7	2	5				
8	2	4		S.S.W.		Variation per azm 15.47 West
9	3	5				
10	3					
11	7					Middle part strong breezes
12	7					took in the light sails.
1	8	2				
2	8	6				
3	8	7				
4	8	4				
5	8	6				Ends with fine breezes
6	8	6				and pleasant all sail set
7	8	6				by the wind.
8	8	5				
9	7	10				
10	7	6				
11	8			S.W.W.		
12	8					

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
S 88 E	149	5	149	38° 10'	38 09	16	292	44 17	

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	8		E.S.E.	S.B.W.		May 1 st 1819 ~
2	8					Commences with strong
3	7	5				breezes and pleasant, all nec-
4	7	3				essary sail set.
5	7	3				
6	7	6				At 7 P.M. took in rizen
7	7	3				top mast and middle stay
8	8					sails.
9	7	6				
10	7	6				
11	8					
12	8					
1	8					Middle part strong bree-
2	7	3				zes and hazy
3	6					
4	6	5				At 7 A.M. set fore top mast
5	6	7				& top gal studding sails sent
6	6	5				up M. R. yard
7	6	3				
8	6					
9	6					
10	6					
11	6					
12	6					

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
S 84 E	175	18	174	37 51		16	220	40 37	

Ship China

China from Sulem towards Gibraltar

H.	K.	H.K.	Courses.	Winds	L.W.	Remarks
May 2 d 1819 ✓						
1	10		ESE	SEW		Begins with moderate breezes and pleasant all necessary sail set by the wind.
2	5	3				
3	5	3				
4	5	2				
5	5	5				
6	4	5				
7	4	5				
8	5					
9	4	7				
10	4	3				
11	4					Variation per ^{am} 18.04 West Middle part light breezes and passing clouds.
12	4			South		
1	4		ESE			
2	4					
3	4	5				
4	4	5				
5	6					
6	6					
7	5	7				
8	6					
9	5	7				Ends moderate breezes & pleasant all necessary sail made
10	6	3				
11	7					
12	7					

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
SE 48	122	23	121	38.14		18	154	38.03	
Northward 84°									

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
May 3 d 1819 ✓						
1	7	5	SESE	SEW		Commences with fine breezes and pleasant all necessary sail set
2	7					
3	7					
4	7					
5	7					
6	7	6				
7	6					
8	6					
9	6					
10	6					
11	7					
12	6	7				
1	6	8				Middle and latter part is fine breezes and pleasant
2	7	6				
3	8	6				
4	7					
5	7	4				
6	7					
7	8	6				
8	7	8				
9	7	6				
10	7					
11	8					
12	8					

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
SE 48	175	18	174	37.36	37.38	19	222	34.22	

Hiram Putnam Master

China from Salem towards Gibraltar

H.	K.	H.K. Courses.	Winds.	L.W.	Remarks
1	8	SEBE	SSW	4	Commences with strong
2	8	2			breezes and passing clouds
3	8				
4	8	2			
5	8	7			At 7 P.M. took in fore tops
6	8	5			mast studding sail.
7	8	5			
8	8	3			
9	8	5			
10	8	5			
11	8				Middle part strong gales
12	8				and cloudy, double reefed
1	8	7			tops sails &c.
2	8	6			
3	9				
4	8	7			
5	8	5			
6	8				Latter part light breezes
7	6				and pleasant, made all sail
8	6				before the wind.
9	6				
10	7				
11	7				
12	7	6			

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Jo.
S 80 E	190	33	187	37.05	37.24	20	234	3028	

H.	K.	H.K. Courses.	Winds.	L.W.	Remarks
1	8	SEBE	West		May 5 th 1819
2	8				Begins with fine breeze
3	8				is and pleasant, all necess.
4	7				ary sail set before the wind
5	8				
6	7				Variation per azm 20.59-
7	6	5	W B N		Middle part cloudy with
8	6				squalls took in the lower
9	7				top mast and top gal. studding
10	7				sails.
11	7				At 5 A.M. made all necess
12	7				ary sail
1	8				
2	8				Ends fine breezes and
3	8				pleasant.
4	7	5			
5	7	5			
6	8				
7	6	5			
8	7				
9	6				
10	7	5			
11	7	5			
12	7				

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Jo.
S 80 E	177	30	174		36.55	21	218	26.59	

Ship China

China from Salem towards Gibraltar

H.	K.	H.K.	Courses.	Winds	L. W.	Remarks
1	7	5	ESE	WBN		May 6th 1819
2	7	5				
3	8					comes in with fresh
4	8					breezes and cloudy.
5	7	5				
6	7	5				Variation per azm 21. 20 West
7	7	6	SEBESE			
8	7	3				
9	8					
10	8					Middle part squally took
11	8					in the spanker
12	7	5				
1	5	5		West		
2	6	7		WNW		At 4.30 A.M. saw a ship
3	6	1				astern.
4	6	5				
5	7	5				At 8 A.M. saw the Island
6	8					of St. Mary bearing NEBE
7	8					at meridian bore North.
8	7	5				
9	8					
10	8		ESSE	NWBN		
11	8					
12	8					

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
SESE	177	5	174		36.40	21	197	25.17	

H.	K.	H.K.	Courses.	Winds	L. W.	Remarks
1	7		ESE	NWBN		May 7th 1819
2	7					
3	6	5				Begins with moderate
4	6	5				breez and pleasant. all men
5	7					up any sail set
6	6	5				
7	6	7				
8	5	3				
9	4	3				
10	4	3				At 4 A.M. set the star-
11	4	2				board main top gal. stee-
12	4					ing sail.
1	3	5				
2	5					At 6 A.M. people empl-
3	5	5				oyed in scraping the
4	5	5				ships side men accident-
5	4	3		WNW		ally the stage broke & two
6	4	2				of the people fell overboard.
7	3					
8	4					
9	4		SEBESE	West		
10	5					
11	5					
12	5					

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
SESE	123	6	122		36.37	21	150	22.47	

Hiram Putnam Master

China from Salem towards Gibraltar

H.	K.	H.K. Courses.	Winds.	L.W.	Remarks
1	6	SEBESEWB			May 8 th 1819.
2	6				Comes in with moder-
3	5				ate and pleasant weather
4	5				all necessary sail set before
5	5				the wind.
6	4				
7	4				
8	3				
9	3				At 1.30 saw a sail bearing
10	2				EBE lying too at 2 was
11	3				boarded by her which proo-
12	3				ved to be a british ship
1	2				from Portsmouth.
2	2				
3	2				At 4 saw a sail to the Ea-
4	2				ward
5	3				
6	3				
7	3				
8	3				
9	2				
10	2				
11	2				
12	2				

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
S 84 E	78	128	77	36.29	36.28	22	97	21 10	

H.	K.	H.K. Courses.	Winds.	L.W.	Remarks
1	2	SEBESE West			May 9 th 1819.
2	1				Begins with light breez-
3	1				es and pleasant weather.
4	1				
5	1				At 7 P.M. took in all sta-
6	1				ding sails.
7	1				
8	1				At 3 A.M. a strong breeze
9	1				from the Eastward took in
10	1				the staysails.
11	0				
12	0				
1	0				
2	0				
3	0				
4	0				
5	3	SE			
6	3				
7	3				
8	3				Ends with light breezes
9	4				and pleasant.
10	4	SEBE			
11	4				
12	4				

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
S 40 E	38	30	24		35.56	23	30	20.40	

Ship China

China from *Salem* towards *Gibraltar*

H.	K.	H.K.	Courses.	Winds	L.W.	Remarks
1	3		SE	East & variable	5	May 10 th 1819 Commences with light breezes and pleasant weather.
2	4	7				
3	4	5				
4	4	5				
5	4	5	SESE			
6	5	5				
7	5		SE			
8	5					At 5 P.M. took in all the light sails.
9	4		SESE		"	
10	4		SE			
11	4					At 6 P.M. saw a sail in the SE. standing to the Northward.
12	4					
1	3	5				
2	4					
3	4					
4	4	5				
5	4		SESE			At 9 P.M. handed the top gal sails & single the top sails.
6	4					
7	4					
8	4					
9	4		SESE			
10	4	5				
11	3	5				
12	4					At 3 A.M. set M. S. G. sail

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
SESE	101	74	67		32.51	23	82	19.18	

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	5		SESE	ENE	"	May 11 th 1819 Begins with strong breezes and cloudy, ship under single reefed top sails.
2	5					
3	5					
4	5					
5	5	5				
6	5					
7	4	5	SESE			
8	5					
9	5		SESE	ENE		
10	4		SESE			
11	4	5				
12	4					Middle part strong breezes and squally.
1	4					
2	4	3				
3	4		SE			
4	4	5				
5	4	5				
6	4	4				Latter part strong breezes and pleasant
7	4					
8	4					
9	4					
10	4	5	SESE	NNE		let the reefs from the S sails.
11	4	5	SESE			
12	4					

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
SESE	112	67	89		33.56	23	106	17.30	

Thuram Putnam Master

Rhine from Salem towards Gibraltar

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	4	5	E 1/2 S	variable		Commences with moderate breezes and hazy all necessary sail set
2	4	5				
3	4	5				
4	4	5				
5	5	3	E 1/2 S 1/2 S			
6	4	7				
7	4	7				
8	4	3				
9	5	4				
10	4	5				
11	5					
12	4	5	ESE			
1	4	5	SSE			Middle and latter parts moderate breezes and pleasant
2	5	3				
3	5	3				
4	4	6	E 1/2 S	variable		
5	4	5				
6	4	5				
7	5					
8	5					
9	3					
10	4	7				
11	4	7				
12	4	5				

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
N 88 E	114	4	114		34.00	22	137	15.13	

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	4		E 1/2 S	NNE	10	Begins with fresh breezes and hazy with a high sea.
2	4					
3	4	5	E 1/2 S			
4	4					
5	4	5	E 1/2 S 1/2 S			
6	4	5	ESE			
7	4		SSE			
8	4		SE 1/2 E	variable		
9	3		North			
10	3					
11	4	5				
12	4	5				
1	4	5				At 8 P.M. tacked ship. At 2 A.M. double reefed the top sails reefed spank a
2	5	5	N 2 W			
3	4		N 1/2 W			
4	4		N 1/2 W 1/2 W			
5	4	4				
6	5					
7	4					
8	4					
9	4		N 1/2 W			
10	4					
11	4					
12	4					

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
N 15 W	112	41	8		34.45	22	10	15.03	

Ship China

China from Salem towards Gibraltar

H.	K.	H.K.	Courses.	Winds	L.W.	Remarks
1	3	5	SEBE	NEBE		May 14 th 1810 Begins with fresh breezes and a heavy sea. At 6 P.M. sent down royal yards. Middle part light airs and cloudy. Ends pleasant.
2	3	7				
3	3	5				
4	3					
5	3		SE	ESE		
6	3	4		variable		
7	3	4				
8	3	6				
9	3	5	SEBE			
10	1	5	SE			
11	1	5	NNE			
12	1					
1	1		NNW			May 15 th 1810 Commences with moderate breezes and pleasant weather. Middle part moderate breezes & cloudy. At 6 A.M. sent up fore royal yard At 10 A.M. set Lower tops mast & tops gal studding sail.
2	1					
3	2		NBW			
4	2					
5	3	5	NWBN			
6	2			NEBN		
7	3					
8	3		EBS			
9	3	5	EBS			
10	4		SEBE			
11	3					
12	3		SE			

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
SEBE	29	12	27		34 35	22	33	14 30	

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	3		SE	ESE		May 15 th 1810 Commences with moderate breezes and pleasant weather. Middle part moderate breezes & cloudy. At 6 A.M. sent up fore royal yard At 10 A.M. set Lower tops mast & tops gal studding sail.
2	3					
3	2	5	SEBE	NEBE		
4	2		East	NNE		
5	4					
6	4					
7	4		EBS			
8	4		EBS	NEBN		
9	4					
10	4					
11	4	5	East			
12	4					
1	4					May 16 th 1810 Commences with moderate breezes and pleasant weather. Middle part moderate breezes & cloudy. At 6 A.M. sent up fore royal yard At 10 A.M. set Lower tops mast & tops gal studding sail.
2	4					
3	4					
4	4	5				
5	4					
6	4					
7	2					
8	2					
9	2	5				
10	1					
11	2					
12	3					

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
SEBE	29	21	74		35 50	22	89	13 01	

Thiram Putnam Master

China from Salem towards Gibralter

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	3	5	East	NBW		May 16 th 1819 ~
2	3	5				Begins with light br
3	2					ees and pleasant weat-
4	2					her.
5	2					
6	1					
7	1					At 7 P.M. took in all
8	0					the studding sails.
9	0					
10	0					
11	0					
12	0		Calm			
1	0					Middle part calm and
2	0					cloudy.
3	0					
4	0					
5	0					
6	0					
7	1	5	E 1/2 S			Ends light breezes and
8	4	5				variable.
9	0					
10	1		East			
11	1		S.E.			
12	0					

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
S 72 E	23	7	21		34.47	23	26	12.35	

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	1	5	East	SSE		May 17 th 1819 ~
2	1	5				Commences with light
3	2					airs and pleasant.
4	1	5		South		
5	1					At 1 P.M. set the staysails
6	1					
7	2			SSW		At 2 P.M. set fore top mast
8	2					and top gal studding sails.
9	2			West		
10	2					At 7 P.M. set the larbo-
11	1	5				ard studding sails.
12	1					
1	2			NNE		
2	1	5				
3	1	5				
4	1					
5	0					Middle and latter part
6	0					to light breezes and pleas-
7	1			WSW		ant.
8	1					
9	2					
10	3					
11	3					
12	3					

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
N 60 E	37	18	32		35.05	22	39	11.56	

Ship China

China from Salem towards Gibraltar

May 18th 1819

H.	K.	H.K.	Courses.	Winds	L. W.	Remarks
1	5		East	NW		Commences with fresh
2	5					breezes and pleasant gale
3	6					
4	6	5		NWBN		At 5 P M saw a Brig
5	7	5				standing to the Westward
6	6	5				
7	5	5				
8	5	5				
9	5	5				
10	5	5				
11	4	5				Middle part strong bree-
12	5					zes and pleasant but
1	5					cloudy.
2	5					
3	5					
4	5					
5	5					
6	5					
7	6					
8	6					Latter part pleasant
9	6	7	EBN			
10	5	7				
11	4					
12	4	5				

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
N 74 E	129	36	124		35 41	20	153	9 23	

May 29th 1819

H.	K.	H.K.	Courses.	Winds	L. W.	Remarks
1	4	5	EBN	NW		Begins with moder-
2	5					ate breezes and pleasant
3	6	5				Variation per azim 19.59
4	6	5				
5	6					
6	6					
7	5					
8	7					
9	6	5				Middle part moderate
10	6	5				breezes and cloudy
11	6	5				
12	7	5				
1	7					At 7.30 A M spoke the
2	7					Spanish patriot Brig
3	7					Independencia on a cru-
4	6					ise
5	6	5	EBN			
6	5	5				
7	4					
8	6					
9	5					
10	4		NWBN			At 8.30 saw Cape Sperle
11	4					bearing SEBE.
12	4					

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
N 84 E	138	15	137	0	35.56	20	170	6.33	

Hiram Putnam Master

China from Salem towards Giberatter.									
H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks	May 20. 1819		
1	4		EBS ^S	West		Comes in with light breezes and pleasant weather all necessary sail set before the wind. At 3 P.M. Cape Sparteell bore SSW distance 4 leagues.			
2	4	5							
3	5								
4	5	5							
5	5								
6	4	5							
7	7								
8	5		EBS						
9	7								
10	6	5							
11	5	5							
12	7								
1	8					At 5 P.M. Giberater cocks bore N.N.E. distance 7 miles Middle and latter part fine breezes & pleasant.			
2	8								
3	8	5							
4	7	7							
5	8	5							
6	8								
7	8	5							
8	8	5							
9	9		East						
10	9								
11	9								
12	9	5							
Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by D.
Nymph	184	42	180		36.34	20	224		
20' allowed for current									

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks			
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									
11									
12									
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									
11									
12									
Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by D.

Ship China

China from Lechorn towards Calcutta

H.	K.	H.K.	Courses.	Winds	L.W.	Remarks
1	2		WBCN			July 13th 1819
2	2					Begins with light breezes and hazy weather
3	2					
4	2					
5	3	5				
6	3	5				At 2 P.M. Gibraltar Cock
7	3					low North W
8	5		West	East		
9	5	5				
10	7					At 11.30 P.M. Tariffa high
11	8					house low North
12	8					
1	8	5	WBCN			Midnight strong breezes &
2	8	7	WBCN			clear weather.
3	8	5	W2S			
4	8	3				
5	8					
6	8			ESE		At 2 A.M. cape Spartel low
7	7	5				SSE distance 2 leagues from
8	7					which I take my departure
9	5	5				
10	5					
11	5					
12	4	5		North		

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
Say 2 W	66	21	65		35.25	19	1.19	7.16	West

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	5		W2S	North		July 14th 1819
2	5					Comes in with light breezes and pleasant weather
3	5					
4	4	5		NE		Watch employed in heaving the anchors in.
5	4	5				
6	4					
7	5					
8	5	5				
9	5					
10	5					
11	4	5				
12	4	5				
1	4		West			
2	3					
3	5					
4	6					
5	5					
6	4	5		East		
7	4	5				
8	3					
9	2					
10	2		SEW			
11	4		West	NE		
12	5					

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
68 E	113	44	93		34.34	20	1.54	9.10	

Hiram Putnam Master

China from Gibraltar towards Calcutta

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1			lying W			commences with light breezes and hazy weather.
2	4		West	NNE		
3	6			North		
4	7					
5	6	5		variable		
6	5	2				Middle part light breezes and variable winds.
7	2					
8	4	5				
9	5					
10	2					
11	4	5				At 9 A.M. took in Royals and flying jib.
12	4					
1	4					
2	2					
3	3					
4	2	5				Ends moderate and pleasant.
5	4	5				
6	4					
7	2					
8	2		WNW S.W.			
9	4		NBW	West		
10	4					
11	4		North			
12	4					

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
S 84 W 74		8	73		34.23	21	1.28	10.38	

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	4		SWBWNWBN			Begins with moderate breezes and cloudy weather.
2	4	5				
3	5		SW	WNW		
4	5					
5	5	5				
6	4	5				Middle part fresh breezes and fair.
7	4	6	SWBWN			
8	4	6				
9	5					
10	3	5				
11	4	5				At 5 A.M. set Royals and flying jib.
12	4	5				
1	4	6	SW	NWBN		
2	4	5				
3	5		SWBN			
4	5					
5	5					
6	4					
7	4	5				
8	3					
9	3		SWBN			
10	3					
11	2		SWBN			
12	2	5				

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
S 28 W 103		89	48		32.29	21	54	11.32	

Ship China

China from Leghorn towards Calcutta

H.	K.	H.K.	Courses.	Winds	L.W.	Remarks
1	3	5	SWBN	WNW	4°	Commences with light breezes and clear weather all necessary sail set by the wind.
2	3					
3	3		SWBN	WNW		
4	3			WNW		
5	2	5	WSW			
6	2	6				
7	2	0				
8	2	5				
9	3	5	West	WNW		
10	3	5				
11	2					
12	1					
1	2		WSW	WNW		Middle part moderate breezes and clear weather At 10 A.M. tacked ship to the Southward & westward.
2	2	5				
3	2					
4	1					
5	0		SWBN	Calm		
6	1		WNW	West		
7	1		WNW			
8	1	5	WNW			
9	2	5	WNW			
10	2	5				
11	2	5				
12	2	5				
						Variation per azimuth 20° Westward

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
462W	38	17	33		31.58	21	30	12.11	

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	3		WNW	WSW	3°	Begins with light breezes and pleasant weather.
2	3	4				
3	4					
4	3	5	WNW			
5	3	5				
6	3	7				
7	3	8				
8	3	5				
9	3	5				
10	2	5				
11	2		WNW			
12	3					
1	4		WNW	West		Middle part moderate breezes and passing clouds
2	4	5				
3	5		WNW			
4	4	5				
5	3					
6	3					
7	1	5	SW	WNW		
8	4					
9	4	6	SWBN			
10	4	6	SWBN			
11	5					
12	5					

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
468W	67	25	63		32.23	22	1.14	13.25	

Hiram Putnam Master

China from Leghorn towards Calcutta

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	4		W 13 S	SW W		Commences with fine breezes and pleasant
2	4					
3	3	5				
4	3	5				
5	4	5				
6	4	5	W 13 S			Middle part fresh breezes and passing clouds.
7	6		W 12 S	North		
8	ny					
9	ny					
10	ny		West			
11	ny					At 7 A.M. set royals, stay sails & flying jib and F. Mast standing sail.
12	6	6				
1	6	ny				
2	6	8				
3	ny	5		NE.		
4	8					At 10 A.M. set M.T.M. Lower & T.G. standing sail
5	8					
6	8					
7	8					
8	ny	5	W 13 S			
9	ny	5				
10	6					
11	6					
12	6					

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
P 64 W	149	1.00	133		31.09	21	2.37	16.02	

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	6	5	W 13 N	NE		Begins with light breezes and pleasant weather
2	6					
3	6					
4	5	5				
5	6					
6	5	5	W 13 N	NE		Variation per azim 20.56
7	6					
8	6					
9	6					
10	5	7				
11	5	7				At 8 P.M. took in fore & mizen Royals.
12	6					
1	6	5				
2	6					
3	5					
4	5	4				At 11.30 saw the Island of Palmah bearing S. by compass.
5	6	5				
6	ny					
7	ny					
8	ny					
9	ny		W 13 N			Meridian set the larboard F. T. G. standing sail
10	ny					
11	6	6				
12	ny					

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
P 41 W	148	1.52	97		29.16	21	1.52	17.54	

Ship China

China from Leghorn towards Calcutta

H.	K.	H.K.	Courses.	Winds	L.W.	Remarks
1	7		SW	SE		July 21st 1819
2	8					Begins with fresh breezes and clear weather
3	7	8				
4	8					
5	8	3				At 4 P.M. the Island of
6	8					Palma bore SE BE per
7	8					compass.
8	7	5				Variation per am 20.13 West
9	7	5				
10	7					
11	7					
12	6	5				
1	5	5		EB		
2	7	7				
3	6					
4	5	5		NEBE		Middle and latter parts
5	7					fine breezes and pleasant
6	6					
7	5					
8	5	4		ESE		
9	5	5				
10	8					
11	5	5				
12	5	5				

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
S 33 W	165	2 19	90		26 57	20	1 42	19 34	

H.	K.	H.K.	Courses.	Winds	L.W.	Remarks
1	5		SW	NEBE		July 22d 1819
2	3	7	SW			Begins with fine breezes and variable.
3	6					
4	5					
5	6					
6	7	7		NE		At 7 P.M. took in Fore &
7	6	7				Mizen top gal sails and
8	6	3				stay sails.
9	7					
10	7	7		NEBE		Middle part moderate
11	6	5				breezes and cloudy.
12	6	7				
1	7	3				
2	7	5				
3	6	5				
4	7					
5	7	7				
6	6	5				
7	6	5				
8	7	8				Ends cloudy weather
9	7	5				& fine breezes.
10	7					
11	6	5				
12	6					

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
S 38 W	158	2 05	97		24 52	20	1 48	21 24	

Hiram Putnam Master

China from Bechoon towards Calcutta

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	6	5	SWB ^W NEBE			July 23 ^d 1819
2	6	5				First part moderate
3	7	3	SW ^W 2W			breezes cloudy weather
4	7	5				A 9.30 P.M. saw a sail
5	7					bearing SSE per compass
6	7					At 9 took in main skysail
7	7					
8	7					
9	7	9				
10	7					
11	7	5				
12	7					
1	6	7				Middle part strong breezes
2	7					and cloudy.
3	7	3				
4	8					
5	8					
6	7					
7	7	5				Latter part fine breezes
8	8					and cloudy.
9	7	6				
10	8					
11	7	7				
12	7	7				

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by D.
S 32 ^W	176	2° 28'	93		22° 24'	20	1° 41'	23° 05'	

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	8		SWB ^W NEBE			July 24 th 1819
2	8					Begins with fresh breezes
3	7					and cloudy weather, all
4	7					necessary sail set.
5	8					At 7 P.M. took in stay-
6	7	5				sails and flying jib.
7	7	5		NE		Variation per azim 16° 30'
8	7	5				
9	8	5				
10	8	5				
11	8	5				
12	7	6				
1	7	5	SWB ^W			
2	7	7				
3	7	5				
4	6	5		NEBE		Middle and latter parts
5	6	7				fresh breezes and cloudy.
6	7					
7	7					
8	7					
9	7					
10	7	5				
11	7					
12	7					

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by D.
S 28 ^W	180	2° 39'	85		19° 46'	17	1° 31'	24° 36'	

Ship China

China from Leghorn towards Calcutta

H.	K.	H.K.	Courses.	Winds	L.W.	Remarks
1	6	6	S 1/2 S	NE	BE	Commences with moderate and pleasant weather.
2	6	6				
3	7	7				
4	7	7				
5	7	7				
6	7	5				
7	6	5				
8	7	5				
9	7	5				
10	8	7				
11	8	7				
12	7	7				
1	7	5	S 1/2 S	ENE		At 3.30 P.M. saw a sail bearing S 1/2 W
2	7	5				
3	7	6				
4	8	7				
5	8					
6	8					
7	7					
8	7	3				
9	7					
10	6	8				
11	7	7				
12	7	7				

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
S 1/2 S	180	171	55		17° 04'	15	56	25° 32'	W

H.	K.	H.K.	Courses.	Winds	L.W.	Remarks
1	7		S 1/2 W	East		Begins with fresh breezes and cloudy.
2	7					
3	7					
4	7	4				
5	6	7				
6	6					
7	6					
8	6					
9	5					
10	5					
11	6	5				
12	6					
1	6		South	ESE		Variation per azim 16.30
2	5	5				
3	5	5				
4	5	7				
5	5	5				
6	5	5				
7	6	5				
8	5	7				
9	5					
10	5	6				
11	6	5				
12	6					

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
S 2 E	144	143	7		14° 58'	12	7	25° 25'	

Thiram Putnam Master

China from Leghorn towards Calcutta

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	5		SBE	ENE		July 27 th 1818
2	5	7				Coms in with brisk
3	5					gales and passing clouds
4	5	7				look in starboard studing
5	5					gards.
6	5	5				At Midnight Cloudy
7	5					Variation per az ^m 14.52
8	5	5				
9	5	5				
10	5	5				
11	5	5				
12	5	5				
1	5					
2	5	5				
3	5	5				
4	5	5				
5	5	5				
6	5	5				
7	5	5				
8	5	5				
9	5	5				
10	5	5				
11	5	5				
12	4	5				

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
S 22 ¹ / ₂ E	151	2.19	58		12.18	11	59	24.24	

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	4		SBE	North		July 28 th 1819
2	5	5				Begins with moderate
3	5	5				breezes and passing clouds
4	5	5				At 7 P.M. look in M. sh
5	5					ysail and mizen royal.
6	5	5				
7	5	5				
8	5	5				
9	5	5				
10	5	5				
11	3	5				
12	3	5				
1	3					
2	3					
3	3					
4	3					
5	4	5				
6	3					
7	2	5				
8	1	5				
9	2	5				
10	2	5				
11	1					
12	1					

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
S 29 ¹ / ₂ E	92	1.20	44		11.05	12	45	23.41	

Ship China

China from Leghorn towards Calcutta

H.	K.	H.K.	Courses.	Winds	L.W.	Remarks
1	1	5	SSE	NE		July 29 th 1819
2	3					Commences with breezes
3	3					and pleasant.
4	2					Variation per az ^m 12.56
5	2					At 10 P.M. took in all
6	2					standing sails and staysails
7	1			ESE		
8	1					
9	1		SW S			
10	1					
11	1					
12	0					
1	0		Calm			
2	0					
3	0					Middle and latter parts
4	1		SSE	SW		light breezes and a hot
5	1					sultry air.
6	1					
7	1		Calm			
8	0					
9	0					
10	0					
11	1		SW S	SSE		
12	1					

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
S 26 E	23	20	10		10° 43'	13	11	23° 30'	W

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	1	5	East	SSE	5°	July 30 th 1819
2	1	5				Begins with light
3	2					breezes and variable
4	2					At 5.30 in royals and
5	2					flying jib.
6	3					At 8 lashed ship to the
7	3	5	SW			Southward and Eastward
8	4		SW S	SSE		At 1 A.M. took in fore &
9	2		ESE			mizen-top gal sails
10	1			South		At 5 A.M. set F & M S.
11	1		SE			of sails royals & flying jib
12	3					
1	4					
2	3	5	SE S			
3	2	5				
4	3	5	SW S			
5	3	5	SSE			
6	4	5		SW		
7	5					
8	2	5				
9	2					
10	2					
11	2					
12	2					

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
S 31 E	47	40	24		10° 04'	13	25	23° 05'	

Thiram Putnam Master

China from Leehorn towards Calcutta

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	2		SSE	WSEW		Commences with light breezes and heavy rain
2	7	5				
3	5		SSE	WSEW		
4	3	5				
5	3	5				
6	4					
7	5			WSEW		
8	6					
9	6	5				Middle part squally with heavy rain took in all the light sails.
10	6					
11	7			WSEW		
12	6	5				
1	6	7		West		
2	7					
3	7					
4	7					
5	6	5				Ends squally with thunder and lightning.
6	5	5				
7	7					
8	7					
9	6	5				
10	6	5		WSEW		
11	7					
12	6	5				

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
S 31 E	144	1 34	74		8° 00'	13	1° 15'	21° 50'	

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	7		SSE	WSEW 4		Begins with fresh breezes and cloudy.
2	7					
3	7					
4	6	5				
5	5	7				At 7 P M single reefed fore and mizen top sails
6	6					
7	5	5				
8	6	5				
9	6	7				At 9 P M single reefed fore main top sail & took in fore and mizen top gal sails & reefed spanker - took in M T G sail.
10	7	5				
11	7		SSE			
12	6					
1	6	5	SSE			At 7 A M set M T G sail
2	6					
3	6	6				
4	6	5				
5	6					At 9 A M set F & M T G sails
6	5					
7	5	7				
8	5	5				
9	5	5	SSE			
10	6					
11	6					
12	6					

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
S 29 E	149	2° 10'	74		5° 49'	13	1° 14'	20° 36'	

Ship China

China from Leghorn towards Calcutta

		K.	H.K.	Courses.	Winds	L.W.	Remarks
		Aug 2nd 1819					
1	6			SE 1/2 E	SE 1/2 E	5°	Begins with fresh breezes and cloudy with a heavy head sea.
2	6	6					
3	5	7					
4	6	3					
5	6			SE	SE		
6	6				SE		Middle part fresh breezes and squally.
7	6			SE 1/2 E			
8	6	5					
9	5	5					
10	6			SE 1/2 E			
11	6						End with fresh breezes and heavy sea.
12	5						
1	6						
2	6						
3	5	5					
4	5						End with fresh breezes and heavy sea.
5	5						
6	5						
7	5			SE 1/2 S	SE 1/2 S		
8	5						
9	4	5					
10	4						
11	4						
12	4						

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
SE 1/2 E	128	1° 53	60		3° 56	14	61'	10° 35	West

		K.	H.K.	Courses.	Winds.	L.W.	Remarks
		Aug 3d 1819					
1	4			SE 1/2 S	SE 1/2 S	5°	Commences with moderate breezes and cloudy weather.
2	4						
3	4			SE			
4	4			SE 1/2 E			
5	5						
6	4			SE			Variation per azim 13° 45' Between 10 & 11 P. M. passed a ship & 2 other vessels standing to the Southward & Westward.
7	5			SE 1/2 E	SE 1/2 E		
8	4						
9	5	5		SE 1/2 E			
10	4						
11	5			SE 1/2 E			Middle & latter parts fresh breezes & cloudy.
12	5						
1	5			SE			
2	4	5		SE 1/2 E			
3	4	5					
4	4	5					
5	5			SE 1/2 E			
6	6						
7	5						
8	4	5					
9	4	5					
10	5						
11	5						
12	6			SE	South		

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
SE 1/2 E	95	21	92	3° 35		14	1° 33	18° 02	

Hiram Putnam Master

China from Lighorn towards Calcutta

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	6		ESE	South	7	Commences with fresh breezes and cloudy. At 1 P.M. sent down no gal yards. At 4 P.M. tacked ship to the Southward & Westward. Midnight tacked to the Southward and Eastward Latter part steady breezes set top gal sails.
2	5	4				
3	5	7				
4	5	4				
5	5	5	WSE			
6	5					
7	6					
8	6					
9	6		WSE			
10	5					
11	5	5				
12	5					
1	6	7	SESE			
2	5	5				
3	4	5				
4	4	5				
5	4	5				
6	5					
7	5		ESE	SE		
8	5					
9	5		SESE			
10	4	5				
11	5					
12	5	6				

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
59E	46	23	39		325	14	39	1723	

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	4	5	SESE	SE	11	These twenty four hours moderate breezes and passing clouds. Is a head sea. N.B. a strong Northwesterly current for which I allow 50'
2	5					
3	5	5				
4	5	7	SESE			
5	5	5				
6	4		SE			
7	4	5	SESE			
8	4	5				
9	5		SE	SE		
10	5					
11	5		SESE			
12	5	6				
1	6	5				
2	6					
3	5	5	SE			
4	6					
5	5		SESE			
6	4	6				
7	5		SESE			
8	4	6				
9	5					
10	5					
11	4	5				
12	4	5				

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
58E	83	10	82		3231	15	122	1621	

Ship China

China from Leghorn towards Calcutta.

Hi.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	4		W B S 2 S 2 W	11		Commences with slea
2	5					dy breezes and passing
3	5		W B S 2 S 2 W			clouds.
4	5		W B S 2 S 2 W			At 1 P.M. turned the
5	5		W B S 2 S 2 W			reefs out of the main
6	6		W B S 2 S 2 W			top sail.
7	6		W B S 2 S 2 W			
8	5		W B S 2 S 2 W			
9	5		W B S 2 S 2 W			
10	5		W B S 2 S 2 W			
11	5		W B S 2 S 2 W			
12	4		W B S 2 S 2 W			
1	4		W B S 2 S 2 W			
2	4		W B S 2 S 2 W			
3	5		W B S 2 S 2 W			Middle and latter parts
4	4		W B S 2 S 2 W			unfavourable winds and
5	5		W B S 2 S 2 W			cloudy weather
6	5		W B S 2 S 2 W			
7	5		W B S 2 S 2 W			
8	5		W B S 2 S 2 W			
9	4		W B S 2 S 2 W			
10	4		W B S 2 S 2 W			
11	5		W B S 2 S 2 W			
12	5		W B S 2 S 2 W			

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
61° N	110	52	96		2° 59'	15	136	17° 3'	

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	5		W B S 2 S 2 W	South 11		Begins with strong br
2	5	3				eezes and cloudy weather
3	5	5				
4	5		W B S 2 S 2 W			
5	5	3	W B S 2 S 2 W			
6	5	5	W B S 2 S 2 W			
7	6		W B S 2 S 2 W			
8	6		W B S 2 S 2 W			At 8.30 P.M. single ree
9	5	6	W B S 2 S 2 W			fed the top sails.
10	6		W B S 2 S 2 W			
11	5	5	W B S 2 S 2 W			
12	5		W B S 2 S 2 W			
1	5		W B S 2 S 2 W			
2	5		W B S 2 S 2 W			Middle part fresh bree
3	5		W B S 2 S 2 W			zes with light showers
4	5		W B S 2 S 2 W			of rain.
5	5		W B S 2 S 2 W			Variation per azm 14° 00.
6	4	6	W B S 2 S 2 W			Latter part squally.
7	4	5	W B S 2 S 2 W			
8	5	3	W B S 2 S 2 W			
9	5	5	W B S 2 S 2 W			
10	5	5	W B S 2 S 2 W			
11	6		W B S 2 S 2 W			
12	6		W B S 2 S 2 W			

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
55° N	102	77	102	1° 42'	1° 47'	14	1° 42'	19° 19'	

Hiram Putnam Master

China from Leghorn towards Calcutta

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	5		SW	SE	6	Aug 8 th 1819
2	4	5				Begins with strong breezes and squally.
3	5	6				
4	5	7				
5	5	7				
6	5	5	SWBY	SEBY		At 4 P.M. set fore and
7	6	5				mizen top gal sails.
8	5					Variation per azm 14 West.
9	4	5				At 9:30 let a reef from M.
10	4	6				top sail.
11	5					
12	5	5	SW	SE		
1	5					
2	5					
3	5					
4	5					
5	6					At 7 A.M. out all reefs.
6	5	5				At 10 A.M. sent up fore &
7	5					Mizen Royal yards.
8	6					
9	6					
10	6					
11	6	5				
12	6					

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Jo.
S 21° W	127	158	45		5 South	14	00° 45'	20° 04'	00

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	5	5	SW	SE	5	Aug 9 th 1819
2	5					Commences with steady
3	5					breezes & cloudy weather.
4	6					
5	4	5	SWBY			At 3 P.M. a heavy squall
6	4	5	South	SE		handed royals and flying
7	3					jib T. G. sails & reefed top
8	2					sails.
9	3		SWBY	SE		
10	4					
11	4					
12	4	5				
1	4					Middle part pleasant
2	4					made all necessary sail
3	4					
4	4	5				
5	3					
6	4					
7	4					Ends pleasant breezes all
8	5					sail set by the wind.
9	4	5				
10	5	5	SWBY			
11	5	5	SWBY			
12	5	5				

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Jo.
S 71° W	102	1° 41'	13		1° 43'	14	113	20° 17'	W

Ship China

China from Leghorn towards Calcutta

H.	K.	H.K.	Courses.	Winds	L.W.	Remarks
1	5		SW 2 S	SSE		Aug 10 th 1819
2	5					Commences with fresh
3	6	5				breezes and clear weather
4	6	6	SW 3 S			
5	6		SW 3 S			
6	5	6	SW 2 S	SE 3 S		
7	6					
8	5	5				Variation per az ^m 12. 22 1/2
9	6	3				
10	6					
11	6					Middle part moderate
12	6					breezes & pleasant, sent
1	4					up mizen royal yard.
2	4					
3	4					
4	4					
5	5		SW 3 S			
6	5	5				
7	5					
8	5	5				
9	6					
10	5	5				
11	5	5				
12	6					

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
12 th 1/2	130	1° 55'	60		3° 32'	12	1° 00'	21° 17'	West

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	6		SW 3 S	SE 3 S		Aug 11 th 1819
2	5	10				Begins with steady
3	6					trades and passing clouds
4	6	6	SW 2 S			People employed in wo-
5	6	3		SSE		ring the cables.
6	6					
7	ny	5	SW 3 S			At 6 P. M. took in the
8	ny	6				staysails At 7 P. M. took
9	ny	5	SW 2 S			in the royals & flying jib
10	6	5				At 10 single reefed fore
11	6	5				& Mizzen T sails.
12	ny					At 9 A. M. single reefed
1	ny					Main top sail.
2	6		SW 3 S			
3	6	5				
4	6	6	SW 3 S			
5	ny		SW 3 S			
6	6	5	SW 3 S			
7	6					
8	ny	10				
9	ny					
10	ny	10				
11	ny		SW 2 S			
12	ny					

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
419 th	160	2° 31'	53		6° 09'	12	54	22° 14'	

Meram Putnam Master

China from Leghorn towards Calcutta

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	7		SW 2 S	SE E	3°	Aug 12 th 1819 ~
2	6					First part moderate breeze
3	5		SW 13 S	SE 13 E		turned out reefs & set
4	4	5				all sail.
5	7		SW 13 S			
6	7					Variation per log 10° 36
7	7		SW 2 W			At 7 P.M. took in Royal
8	6	7				& reefed Mizzen top sail.
9	7	6	SW W			
10	7	5				
11	7		SW 13 W			
12	7		SW 13 S			
1	7		SW 13 S			
2	7					
3	7		SW 2	SE E		
4	6	5				
5	7					Latter part squally with
6	6	5				rain
7	7					
8	7					
9	5		SW 13 S	SE 13 E		
10	4	5				
11	4	5	SW 13 S			
12	5	5				

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
S 29 W	153	2° 13'	72		8° 36'	10	1° 14'	23 25	

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	3		South	SE E	11°	Aug 13 th 1819
2	3	5	SW 13 S	SE 13 E		Begins with fresh breeze
3	6					and squally.
4	7	5	SW 2 S			At 2 P.M. reefed fore &
5	6					Mizzen top sails.
6	6	5	SW 13 S			
7	6					At 7 P.M. took in fore &
8	7	5	SW 2 W			Mizzen top & set sails in
9	6					single reefed Main top
10	5	5				sail
11	5		SW 13 S			
12	5	5				
1	5		SW 13 S			
2	7	5	SW W			
3	6					
4	4	6				
5	5					
6	5					
7	6					At 9 A.M. reefed the st
8	6	7				unner.
9	6	5	SW 13 S			
10	6					
11	5	5	SW 2 S			
12	6					

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
S 32 W	137	1° 56'	72	10° 18'	10° 36'	10	1° 13'	24 38	

Ship Khim

Khima from Leghorn towards Calcutta

H.	K.	H.K.	Courses.	Winds	L.W.	Remarks
1	5		SSW	SE	5	Begins with strong breezes and passing clouds
2	5					
3	5	5	SSW			
4	6	5				
5	6		SSW			
6	6	5	SSW			Varies per az ^m 8° 38' West
7	7		SSW			
8	5	5				
9	6	5	SSW			
10	7					
11	6					At 6 P.M. sent down Royal yards.
12	6		SSW	SE		
1	6					Middle part strong gales and cloudy double reefed fore and mizen top sails
2	5					
3	5					
4	6					
5	7		SSW	SE		
6	6	5				Latter part strong trades
7	6					
8	7					
9	6		SSW	SE		
10	6	5				
11	5					
12	6	5				

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
SSW 144	2° 16'	47'			15° 00'	9'	48'	25° 26'	West

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	7		SSW	SE	5	Ship under single reefed top sails
2	7					
3	7		SSW			
4	7			SE		
5	6		SSW			
6	6	6	SSW			Varies per az ^m 7° 4' West
7	7	6				
8	7		SSW			
9	7	5				
10	6	5	SSW			
11	5					Middle part squally look in fore top gal sail.
12	5		SSW			
1	6		SSW			
2	5		SSW			
3	5		SSW			
4	5	5				Latter part more moderate set top gal sails out reef
5	5		SSW			
6	6					
7	7		SSW			
8	6					
9	6	5	SSW			
10	6	5				
11	7		SSW			
12	6					

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
SSW 144	2° 15'	60'			15° 12'	7'	1° 02'	26° 28'	

Hiram Putnam Master

China from Leghorn towards Calcutta

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	5		SSW 2/3 SE	SE	3°	These twenty four hours steady breezes and pleasant weather all necessary sail set.
2	6					
3	6		SSW			
4	6					
5	6		SSW 2/3			
6	6		SSW			
7	6					
8	5	8	SSW 2/3			
9	7					
10	6					
11	6					
12	6			SE 2/3		
1	6					Variation per azm 6° 06' to Turned the reef out of mizzen top sail.
2	6					
3	5	5				
4	5		SSW 2/3			
5	5		SSW			
6	5					
7	5					
8	5	5	SSW			
9	5	7	SSW 2/3			
10	5					
11	5	5				
12	5	5				

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
SSW 1/3	133	1° 54'	68		17° 1'	0	1° 11'	27° 39'	

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	5		SSW	SE	5	Begins with moderate breezes and pleasant weather.
2	5					
3	5	5				
4	5	5				
5	5		SSW 2/3			
6	5					
7	6	5	SSW			
8	6		SSW 2/3			
9	5	5	SSW 2/3			
10	5			SE		
11	5					
12	6					
1	5		SSW			Variation per azm 5° 11' W Midnight heavy squalls took in top gal sails & single reefed the top sails At 5 A.M. reefed the Main sail Latter part squally with rain.
2	5					
3	5					
4	6					
5	5					
6	5					
7	5		SSW 2/3			
8	5	5	SE			
9	4					
10	4		SSW			
11	4		SSW			
12	4					

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
SSW 1/3	120	1° 38'	68		18° 40'	5	1° 12'	28° 51'	

Ship China

China from Leyhorn towards Calcutta

H.	K.	H.K.	Courses.	Winds	L.W.	Remarks
1	5		SWB'S	SEB'S	11	Aug 18th 1819
2	5					Commences with str-
3	5	5	SSW			ong breezes and cloudy
4	5	3				
5	6					
6	6	6				
7	6					
8	6		S by W	SE		At 8 P.M. reefed main
9	5					sail.
10	5					
11	5	5	SSW			
12	5					
1	5		S by W			At 5 A.M. let a reef out
2	4					of the top sails and set
3	4					top gal sails
4	4			ESE	3	
5	4		SSW			
6	5	4				
7	5		SSW			
8	4		S by W			Ends with fine bree-
9	5		SSW			zes & pleasant all sail set
10	5	7				
11	5		SSW			
12	6					

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
223 ¹	122	1° 52'	4 ¹		20 41	5	50	20 41	W

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	5		SSW	SE	4	Aug 19th 1819
2	5	5				Begins with moderate
3	5					breezes and pleasant we-
4	6		S by W	ESE		ther.
5	5	3	SSW			
6	6		SWB'S			
7	6					
8	6	5	SSW	SE		Variation per azim 2.07 ¹
9	6	5				Middle part squally so
10	6	5				myte reefed T. & M. top sails
11	6	5		ESE		
12	6					
1	4		SSW			
2	6		SSW			
3	5	5	SWB'S			
4	5	5				
5	4					
6	5			S by S		Latter part pleasant all
7	6					sail set.
8	6		SWB'S			
9	6		SWB'S			
10	6					
11	5	4				
12	5					

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
229 ¹	143	125	68		22 38	2	113	30 54	W

Thirum. Pitnam Master

China from Loughorn towards Calcutta

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	5	5	SSW 2 1/2 SE			Commences with moderate breezes and pleasant weather. Variation per az ^m @ 4 ³⁰ 1 ²¹
2	5	7	SSW			
3	5	5	SSW			
4	5	5	SSW			
5	5	7	SSW 1/2 W			
6	5	3	SSW			
7	6		SW 1/2 S SSE			
8	5	5				
9	5	5	S by W SE 1/2 S			
10	5					
11	5					Middle part moderate breezes and cloudy. Watch employed in unbending & bending top sails. Ends light breezes.
12	4					
1	3	5	SSE	East		
2	3					
3	3	5				
4	1	5				
5	1	5				
6	1	5				
7	1	5				
8	1	5	SE 1/2 S ENE			
9	1	5				
10	1	5				
11	1	5				
12	1	5				

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
SSW 2 1/2	84	1 ¹⁸	33		23 ⁵⁸		36	31 ³⁰	

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	1	5	SE	ENE		Begins with light airs & pleasant weather. At 2 P.M. caught a large Shark.
2	1					
3	1					
4	2					
5	1	5				
6	1					
7	1					
8	2					
9	2	5				
10	2	5				
11	2	5				Set Landward studding sails Latter part calm.
12	2	5				
1	2	5				
2	2	5				
3	2	5		WNW		
4	1					
5	1	5				
6	"					
7	"					
8	"					
9	"					
10	"					
11	"					
12	1					

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
SSW 2 1/2	32	25	23		24 ²⁸		" 22	31 ⁸	West

Ship China

China from Leghorn towards Calcutta

H.	K.	H.K.	Courses.	Winds	L.W.	Remarks
1	2	5	SE	SW		Aug 22d 1819.
2	3					Begins with light br-
3	3					ees and pleasant weather.
4	4	6				At 2 P.M. set larboard
5	4	6				lower studding sail.
6	4					At 3 P.M. set larboard
7	4					main topmast & top
8	4					gal studding sails.
9	5					Varia per az ^m 430-124 W
10	5					
11	5	5				
12	5	5				
1	5	5				
2	5	7				
3	6					
4	5	5				
5	6	3				
6	6					
7	6					
8	6					Middle and latter parts
9	6					moderate & pleasant.
10	6					
11	6					
12	6					

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
S 46 E	122	1° 24	88		25° 41	1° 14	1° 37	29° 31	West

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	7		SE	SW		Aug 23d 1819.
2	7					Commences with steady
3	6					breezes and pleasant weather.
4	7					
5	6					
6	7					
7	7					
8	7					
9	7	5				
10	7	5				Middle part fresh breezes
11	8					and clear weather.
12	8					
1	7	5				
2	8					
3	7	5				
4	7	5				
5	7	8				
6	7	5				
7	7					
8	7					Ends fine breezes.
9	6	5				
10	6	5				
11	6	5				
12	6	5				

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
S 46 E	170	1° 54	126		27° 28	3	2° 20	27° 11	

Thim Phum Master

China from Leeghorn towards Calcutta

H.	K.	H.K. Courses.	Winds.	L.W.	Remarks
1	6		SE		Aug 24 th 1819
2	6				Commences with moder-
3	6				ate breezes and pleasant
4	5	7			weather all necessary sail
5	2	7			set
6	5	6			
7	5				
8	6				
9	6				
10	6				
11	6				
12	7				
1	6				
2	6				
3	6				
4	5	5			Middle and latter parts
5	5	5			moderate breezes and ple-
6	6				sant weather.
7	6	5			
8	7				
9	6	7			
10	5				
11	6	5			
12	6				

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
S 50 E	145	1° 33'	111		28° 57'	5	2° 06'	2505	

H.	K.	H.K. Courses.	Winds.	L.W.	Remarks
1	7	SE 3/4 E	NW		Aug 25 th 1819
2	3				Begins with fresh bree-
3	5				zes and squally
4	6	5			At 6 P M took in top gal S
5	6	5			sails & M. T mast striding
6	7	5			sail.
7	6				
8	7				
9	7				
10	8				
11	8	3	North		At 11 P M took in royal
12	8	5			& top gal sails.
1	8	5			At midnight reefed top
2	8				sails sparker & main
3	8				sail sent down royal yar-
4	8				d
5	7	5			Latter mod. mod sail
6	7	5			
7	7				
8	7				
9	7				
10	7	6			
11	7	5			
12	7	6			

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
S 68 E	172	1° 04'	159	30° 01'		6	3° 02'	2205	

Ship China

China from Leghorn towards Calcutta

H.	K.	H.K.	Courses.	Winds	L.W.	Remarks
1	8	3	SEBESE	NNE		Aug 26 th 1819
2	8	3				Begins with strong
3	8					breezes rainy weather.
4	7	5				
5	6					
6	6	5		North		At 6 P. M. took in lower
7	8					studds & M. royal.
8	7	6				
9	7	8				
10	8					Middle part strong br-
11	7	7				ezes and cloudy. At 2 A.M.
12	8			NNE		took in top gal sails double
1	8					reefed fore & mizen top sai-
2	8					ls & single reefed main
3	8	7				top sail. at 9 close reefed F. & U
4	8					top sails. At 10 took in F. & U
5	8					top sails & reefed F. sail.
6	7	3				
7	7					
8	7	6				
9	7	6				
10	7					
11	6	5				
12	6	5				

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
SEBESE	182	1.05	174	31.06	00 00	7	3.16	18.49	West

H.	K.	H.K.	Courses.	Winds	L.W.	Remarks
1	6		SEBESE	NBE		Aug 27 th 1819
2	6	5				Strong & favourable gales
3	6					and a heavy sea.
4	6	5				
5	6		SEBESE			
6	7	5				At 1 P.M. set the main
7	6	5		NNE		staysail.
8	6	5				
9	6	5				
10	6	5				At 2 P.M. sent down
11	6	5				fore and mizen top gal
12	6	5				yards.
1	7	5				
2	7					
3	7					
4	7					Middle part more mod-
5	7					erate sd close reefed fore
6	7	6				& mizen top sails.
7	7	5		NW		
8	7	5				
9	7					
10	8					At 5 A.M. out all reefs.
11	8					
12	7	5	SEBESE			

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
SEBESE	164	66	152	32.12	32.23	8	2.59	15.50	

Hiram Putnam Master

China from Leghorn towards Calcutta

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	7		EBE	NW by N		Aug 28th 1819
2	7	5				Strong breezes and cloudy weather.
3	6	8				
4	7	7				
5	7		EBE			At 4 P.M. set main top mast staysail.
6	8					
7	7	5				
8	7	5				
9	7			S by E		Middle part moderate weather and cloudy.
10	5	7				
11	6	5				
12	6					At 5.30 A.M. turned out all reefs set 5 top mast staysail.
1	6	5				
2	6					
3	6					
4	6					
5	4	5				
6	4					
7	3					
8	4	5		S by E		At 3 a new main top gal sail unbent the spanker & bent the storm mizen.
9	6					
10	7	5				
11	7	5				
12	7	5				

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
282	154	12	12	32 35	32 29	19	2 50	1254	

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	6	7	SE by E	NE by E		Aug 29th 1819
2	6	7				Begins with light airs all sail set before the wind.
3	6	5				
4	6	5				
5	5					
6	5					
7	4	5				
8	4	5				At midnight took in fore & mizen top gal sails.
9	4					
10	3					
11	3					
12	2					
1	1	5				Variation per azim 14.00
2	1					
3	0					
4	2	5	SE by E	East		At 3 A.M. took in jib & main sail & studding sails
5	4					
6	5		SE by E	NE		
7	6					Ends cold & cloudy
8	7	5				
9	8					
10	8					Ship under single reefed top sails.
11	8					
12	8					

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
283	116	34	116	35	03		11	2" 10	10" 44 West

Ship China

China from Leghorn towards Calcutta

H.	K.	H.K.	Courses.	Winds	L.W.	Remarks
1	8		SE by E	NE		Aug 30 th 1819
2	ny					Begins with strong br-
3	ny					ees and rainy weather.
4	ny					Ship under close reefed
5	6	5	SE by E			top sails & Mizzen at 130
6	5	6				close reefed all. top sail &
7	ny		ESE	W by N		took in fore & mizen top
8	6	ny				sails jib & main sail.
9	ny	5				At 4 P.M. set fore top sail
10	ny					At 5.30 reef out of fore & M
11	8	5				top sails & set M. top sail
12	8	5				At 6.30 let a reef out of the
1	8					top sails. & set. lb. T. G. sail
2	8	5				
3	8	6				
4	8					
5	8	5				
6	8					
7	8	5				
8	8					
9	8	3				
10	8					
11	8					
12	8					

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
S 78 E	184	39	180		33° 36'	12	3° 35'	71° 09'	West-

H.	K.	H.K.	Courses.	Winds	L.W.	Remarks
1	9		E by S	N by E		Aug 31 st 1819
2	8					Commences with strong
3	8					breezes and hazy weather
4	8	5				with a large following
5	8	6				sea.
6	8	5	SE by E	W by N		
7	8	5				
8	8	5				
9	8	6				
10	8					
11	8					
12	9					Middle part fresh breeze
1	8	5		WSW		& squally.
2	9					
3	9					
4	8	5				
5	8					Set jib & spanker.
6	8	5				
7	8	3		SW		
8	8					Latter part fresh breezes
9	8					under single reefed top sail
10	8					
11	8					
12	ny	5				

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
S 81 E	194	30	191		34° 06'	13	3° 48'	3° 21'	West-

Kiram Putnam Master

China from Leghorn towards Calcutta

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	2		SE by E	SSW		Begins with moderate breezes and cloudy weather. At 1 P.M. set Main top mast staysail.
2	2	5				
3	2	8				
4	2	7				
5	2					
6	8					
7	7	5		SE by W		
8	7	5				
9	7					
10	5	7				
11	10	5				Middle part moderate breezes and cloudy. At 5 ³⁰ A.M. turned out all reefs. Latter part bent a new top gal sail & storm Mizzen.
12	5					
1	7					
2	5	5				
3	7					
4	6					
5	4	5				
6	4					
7	5		SE by S	SSW	3	
8	4	5				
9	3					
10	2	5	EBSE			
11	2	5				
12	2	5	E 1/2 S			

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
S by E 137	31	132	34	37	No obs	16	2° 39	42 West	

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	2		EBSE	SE by E		Commences with light airs inclining to a calm.
2	2		EBSE			
3	1		EBSE			
4	1		NEBE			
5	2					
6	1	5				
7	0					
8	0					
9	2		SSW			
10	3					
11	4		S			Middle part took in fore and mizzen top gal sails. Variation per az 17° 12 W. At 11 A.M. took in Sit and main sail. Ship under single reefed top sails.
12	4	10				
1	5	2	SE			
2	2					
3	5		S	ESE		
4	4					
5	5		S 1/2 E			
6	5					
7	5		S			
8	5					
9	5		S 1/2 W			
10	5					
11	5					
12	4	3				

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
S 149	53	51	13	35° 28		17	16	26 W	

Ship China

China from Loughor towards Calcutta

H.	K.	H.K.	Courses.	Winds	L.W.	Remarks
1	4		S 1/2 W	SE	20	Begins with fresh breezes and cloudy. At 10 P.M. backed ship to the Northward & Eastward and double reefed fore & Main topsails.
2	5					
3	5		S B W			
4	4					
5	4	5	S B W W			
6	4	5				
7	4		E N E	SE		
8	4					
9	4	5				
10	4					
11	4	5				
12	4					
1	4		E B N	SE		At 10 P.M. close reefed fore and Mizzen topsails. Middle and latter parts strong breezes and squally.
2	4	5				
3	4		E 1/2 N			
4	4	5				
5	4					
6	4					
7	3		E B N			
8	4	5				
9	5		E 1/2 N			
10	5					
11	5					
12	5		East			

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
N 49 E	50	32	38		34° 58'	17	47	21	East

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	5		E B S 1/2 S	S 1/2 E	11	Begins with fresh gales and squally. Variation per Azim 19° 14' W Middle part squally with rain. At 9 A.M. took in the jib Ends fresh gales and squally.
2	5					
3	5	5				
4	5					
5	5					
6	5					
7	5	5	E S E	South		
8	5	5				
9	5					
10	5					
11	5					
12	5					
1	5	5				Ends fresh gales and squally.
2	4	5				
3	4					
4	5					
5	4	5				
6	5		E S E 1/2 S			
7	5					
8	5					
9	4	5				
10	4		S B E			
11	4		E B S 1/2 S			
12	4					

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
N 70 E	117	28	113	34° 25'	" "	19	2° 17'	2° 38'	East

Thiram Putnam Master

China from Leghorn towards Calcutta

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	5		E 1/2 S	SSE	"	Commences with strong
2	5					breezes and squally.
3	5		East	SSE		
4	5					
5	5		E 1/2			At 4 P.M. turned reef
6	4	5				out of main sail.
7	4		ESE	S		
8	4	5				
9	4		E by S			At 9 P.M. let a reef out
10	4					of main top sail & set
11	3	5				main top gal sail.
12	4					
1	3	5				
2	4					At 10 P.M. turned a reef
3	5					out fore & mizen top
4	5		EBS	SE		sails & set top gal sails.
5	4		EBS	N		
6	5					Var per azm 21 West.
7	4		ESE			
8	4		ENE			
9	4					
10	5					
11	4	5	East	SSE		
1	4	5				

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
N 64 E	103	45	93		33° 45'	21	4° 29'	4° 29'	East

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	5		EBS	NSE		Commences with mod-
2	5					erate breezes and pleasant
3	4	5	ENE	SE		weather.
4	4					
5	4	6	NESE	SE		Var. per azm 21° 18'
6	4					At 8 P.M. tacked ship
7	3	5	NESE			
8	3		SE			
9	2		SE			
10	2					
11	1					
12	1					
1	1	5	SE			
2	1	5				
3	2					Middle & latter parts
4	1	5				moderate and pleasant
5	1	5				all sail set necessary
6	2					
7	3		SE			
8	2					
9	2					
10	2		SE			
11	2					
12	2	5				

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
S 80 E	20	4	19		33° 51'	21	23	4° 52'	

Ship China

China from Leshorn towards Calcutta

H.	K.	H.K.	Courses.	Winds	L.W.	Remarks
1	1	5	SbyW	SEBSE		Commences with light breezes and pleasant weather.
2	2	5				
3	2	5				
4	2	5				
5	3					
6	3					
7	3		SEBSE			Middle part moderate and cloudy.
8	3	4		East		
9	3	5	SE			
10	3	5	SE			
11	4		SEBSE			
12	4		SEBSE			
1	5		SEBSE			At 3 ³⁰ A.M. set stay sail and fore top mast studding sail
2	5		SE	SEBSE		
3	5	5				
4	6	7				
5	6	6				
6	7					
7	7	5				At 7 A.M. sent up main royal yard.
8	7	5				
9	7	6				
10	8					
11	8					
12	8					

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
S 57 E	114	1° 03	95		35° 07	22	1° 54	6° 46	East

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	8		SE	NE		Begins with strong breezes and pleasant weather.
2	8					
3	8					
4	8					
5	8					
6	8					
7	9					Var. per az ^m 23° 17 West
8	9			N		
9	9	5				
10	9					
11	9					
12	9					
1	9					At 6 A.M. set Lower & main T & G studding sail
2	9					
3	9					
4	8			NNW		
5	8	5				
6	8	5				
7	8	5				At 10 A.M. sent up fore Royal yard
8	8					
9	8					
10	8	5				
11	8					
12	7	5				

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
S 64	203	1° 29	182		36° 36	23	3° 45	10° 31	

Hiram Putnam Master

China from Leghorn towards Calcutta

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	8		SE 1/2 E	N		These twenty four hours fresh gales and pleasant weather.
2	8	5				
3	8	5				
4	8	6				
5	7	3				
6	7	7				
7	8					
8	7	5		NW		Middle part steady breezes and cloudy.
9	7	7				
10	8					
11	8	5				
12	8					
1	8					
2	8					
3	8					Latter part fresh breezes and pleasant.
4	8					
5	8					
6	7	5		N		
7	7	6				
8	7	7				
9	7	6				
10	7					
11	8		SE 1/2 E			
12	8					

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
8758	189	"49	183		37 25		3" 49	14 20	East

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	7	5	SE 1/2 E	N		Begins with fresh breezes and cloudy weather
2	7	5				
3	7	4				
4	7	6				
5	7					
6	8	5				Middle part fresh breezes and clear weather.
7	8	5				
8	8					
9	7	6				
10	7	7				
11	9					Variation per azm 25 29 West
12	8	5				
1	8	5				
2	8	5				
3	8					
4	8					Latter part fresh breezes & pleasant.
5	8					
6	7	7				
7	8					
8	8	5				
9	8	5				
10	8					
11	8					
12	8					

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
879	188	37	185		38 02		3 55	18 15	

Ship China

China from Loughorn towards Calcutta

H.	K.	H.K.	Courses.	Winds	L.W.	Remarks
1	8		SEBE	North		First part moderate
2	8	6				breezes and pleasant wea-
3	8					ther.
4	7	7				
5	7	6				
6	6	5				
7	6					
8	7			NNW		Var. per az ^m at 4 ⁴⁰ P.M. 27
9	7					At 11 P.M. set starboard
10	6	5				main top mast studding
11	5	5				sail.
12	5			WNW		
1	6					Middle part set starboard
2	6					Lower studding sail.
3	7	6				At 4 U.M. set starboard
4	7					M. T. V. studding sail
5	7	5				Squally look in studding sail
6	7					
7	7					
8	8					
9	8	5				
10	8					
11	8					
12	7	6				

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
SEBE	172	0	172		38° 08'	"	3° 39'	21° 54'	

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	8		SE by E	WNW		Sept. 12 th 1819
2	8					Begins with strong br-
3	7					ezes and cloudy weather
4	7	5				all sail set before the w-
5	6	5	SE by E			ind
6	6	5				
7	6	5				At 6 P.M. took in m-
8	7	5				ain top mast top gall
9	7	5				& starboard lower studd-
10	8	5				ing sail. At 10 in all studd-
11	8	5				ing sails. At 2 A.M. took
12	8	5				in M. sail & double reefed
1	8					the top sails.
2	8					
3	8					
4	8					
5	8					
6	8					
7	8					
8	8					
9	8					
10	8					
11	8					
12	8					

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
SEBE	182	12	182		37° 54'	28'	3° 51'	25° 44'	

Hiram Putnam Master

China from Leghorn towards Calcutta

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	7	5	SE by E	SW		Begins with strong breezes and heavy squalls At 6 P.M. reefed the main and handed it. At 10 P.M. set the mizen
2	7	5				
3	7	5				
4	7	5				
5	7	5				
6	7					
7	8					
8	8					
9	8					
10	8					
11	7	6		MNW		Middle part strong breezes and heavy squalls. At 5 A.M. struck a reef out of the top sails, set the top gall sails jib & Main sail.
12	8	8				
1	7	5				
2	8					
3	7	5				
4	8					
5	7	5				
6	7					
7	8			West		
8	8					
9	8					
10	8	8				
11	7	6				
12	7					

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
S 84° E	186	19	185		38° 16'	28	3° 55'	29° 39'	East

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	6		SE by E	MNW		Commences with strong breezes and squally weather. Var. per azim 28° 42' West
2	6					
3	3			West		
4	3					
5	4					
6	3					
7	3					
8	4					
9	5					
10	6					
11	7					Midnight fresh gales & heavy squalls close reefed fore and mizen top sails
12	7					
1	4					
2	11	5				
3	7			MNW		
4	6					
5	7					
6	7	6				
7	7					
8	8					
9	8					
10	8					
11	8					
12	9					

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
S 82° E	189	27	194		38° 49'	28	4° 10'	41° 08'	East

Ship China

China from Leghorn towards Calcutta

D.	K.	H.K.	Courses.	Winds	L.W.	Remarks
1	9		SEBE	NNW		Sep 15 th 1819 ~
2	8	6				Begins with strong ga-
3	8					les & squally.
4	8					
5	8					
6	8			NW		At 2 P.M. took in fore &
7	8					mizen top gal sails and
8	9					lower standing sail. At 3
9	8	5				took fore top mast standing
10	8	5		West		sail & mizen. At 6 dou-
11	8	5				ble reefed fore topsail.
12	8	5				
1	9					At 9 took in main top
2	8	5				gall sail & reefed mainsail.
3	8					At 2 A.M. close reefed F.T. sail.
4	8					& double reefed M.T. sail.
5	8	5		WSW		
6	8					
7	9					
8	9					
9	8	5				
10	8	5				
11	8	5				
12	9					

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
SEBE	205	14	205		38° 22'	28'	4° 20'	36° 58'	East

D.	K.	H.K.	Courses.	Winds	L.W.	Remarks
1	8	5	SE by E	WSW		Sep 16 th 1819 ~
2	8	6				Begins with strong
3	9					breezes & passing squalls
4	9					took in the main sail as
5	8					necessary.
6	9					
7	8	5				
8	8					
9	8					
10	9					
11	8	5		W by N		
12	9					
1	9					Latter part more mod-
2	9					erate turned a reef out
3	8	6				of the top sail & set the
4	8					top gall sails starboard
5	8					board & F.T. Mast standing
6	8					
7	8					
8	8					
9	7	5				
10	7					
11	7	5				
12	7					

Cou. se.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
SEBE	198	27	194		38° 49'	28'	4° 10'	41° 08'	East

Hiram Putnam Master

China from Leghorn towards Calcutta

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	5		SE by E	WNW		Begins with moderate
2	6					breezes & cloudy.
3	7					
4	7	6				At 3 P.M. set Starboard
5	8	6				lower studingsail.
6	8					
7	8					
8	8					
9	8					
10	7	5	SE by E	WNW		At 4 P.M. set main top
11	8					mast studingsail.
12	8	4				
1	8	6				At 6 P.M. took in F & M
2	9					top mastsails.
3	9	3				
4	8					
5	9					At 11 P.M. took in all
6	9					studg sails & main royal
7	8	5		WN		Middle & latter parts squ
8	8					ally took in sail accordingly
9	8	6				
10	9					
11	9					
12	8					

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
SE by E	189	9	189	38°59'		27	4°01'	45°09'	

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	5		SE by E	WNW		Commences with strong
2	6	5				breezes.
3	6	5				
4	6	5				
5	7	5				
6	7			WNW		At 7 P.M. set lower & fore
7	6					topmast studingsail.
8	6					Middle part squally.
9	6	5				
10	6	5				
11	7	5				
12	7	5		WNW		At 4°30 A.M. took in all
1	7	5				studingsails F. G. sails &
2	7					double reefed the sails
3	7	5				
4	7					At 7 A.M. sent down
5	7					main royal yard.
6	6					
7	6					
8	9					
9	9			WNW		
10	9					
11	9					
12	8	5				

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
SE by E	185	175	175	38°53'	27	3°42'	48°51'		

Ship China

China from Leyhorn towards Calcutta

H.	K.	H.K.	Courses.	Winds	L.W.	Remarks
1	9		ESE 1/2 E	WSW		Sep 19 th 1819
2	8	6				Begins with strong
3	8	5				breezes and squally
4	8	5				At 1 P.M. took in the Sit
5	8	6				and handed the main
6	8	8		SSW		sail
7	8					Middle part strong bree-
8	8					zes & squally close reefed
9	9					the fore & Mizzen top sails.
10	9					At 3 A.M. took in Mizzen
11	9		SE by E	SW		top sail At 6 reefed fore
12	9					sail.
1	8					
2	8					
3	8	5				
4	8	6				
5	8					
6	8	5				
7	9					
8	9			SW by W		
9	8					
10	8					
11	8					
12	8					

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
N 80 E	205	36	201		38° 17'	27	4° 15'	53° 06'	

H.	K.	H.K.	Courses.	Winds	L.W.	Remarks
1	8	6	EE 1/2 E	SW		Sep 20 th 1819
2	8					Commences with strong
3	8	5				gales & heavy sea with
4	7	5				heavy squalls of hail; took
5	8	3				in the fore top sail.
6	8					
7	7					
8	7					
9	7					
10	6	5				
11	7					
12	7					
1	7					
2	6	5				At 3 A.M. set fore top sail
3	6	5				At 5 A.M. set mizen top sail
4	7					At 6 turned the reef out
5	7	5				of F sail & set M sail
6	7	5				
7	7	5				
8	7	5				
9	7	5				
10	6	5				
11	6					
12	6	5				

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
N 85 E	168	14	164		38° 04'	26	3° 32'	56° 38'	

Thos Putnam Master

China from Leghorn towards Calcutta

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
Sep 21 st 1814 ✓						
1	7		ESE	WSW		Commences with moderate breezes and cloudy.
2	7					
3	6					
4	5	5				
5	4					
6	5					At 2 ³⁰ P.M. set fore & M. top gal sails.
7	4	5		SW		
8	4	5				
9	4					Middle part moderate & cloudy.
10	5					
11	4	5				
12	5			West		At 2 A.M. set the fore top. mast & lower standing sails, Jib & mizen.
1	5					
2	7					
3	7					
4	7					
5	7					At 9 A.M. took in standing sails & mizen top gal sail.
6	6	5				
7	7	5				
8	8	5		NW		
9	9					
10	9	5				
11	9	5				
12	9					

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
N 88 E	154	"5	154		38° 00	26	3° 15	59° 53	East

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
Sep 22 d 1814 ✓						
1	9	5	ESE	NW		Squally took in top gal sails & double reefed the top sails & hauled the main sail & jib. At 3 P.M. close reefed the fore & mizen top sails.
2	7					
3	8	5				
4	8	5				
5	8	5				
6	8					Middle part fresh gales.
7	8	5				
8	8	5				
9	8					At 6 A.M. turned out all reefs & set top gal sails.
10	8	5				
11	8	5				
12	8	5				
1	8					
2	8					At 8 sent up M. R. yard & set F. T. Mast study sail
3	8					
4	6	5				
5	6					
6	6					
7	6					
8	6					
9	5					
10	6					
11	7	5				
12	6	5				

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
N 84 E	184	"3	184		37° 56	22	3° 53	63° 46	East

Ship China

China from Leghorn towards Calcutta

H.	K.	H.K.	Courses.	Winds	L. W.	Remarks
1	6	5	E by S	NW		Sept 23d 1819
2	8	3				Begins with moderate
3	8	5				breezes & rainy.
4	8	5				At 2 P.M. took in fore
5	5					top mast striding sails.
6	8	5		NW		At 2 ³⁰ P.M. set fore top
7	8					gal sail. At 4 ³⁰ set M. sail
8	8	5				Mizen & Fid. At 8 P.M.
9	8					took in top gal sails &
10	8					reefed top sails. At 9 P.M.
11	8					double reefed M top sail &
12	8					took in the jib. Strong gales
1	8					continued to shorten sail
2	9					
3	4					
4	8					
5	9					
6	8	5				
7	8	5				
8	9					
9	9					
10	8	5		NW		
11	8					
12	8					

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
N 80 E	200	34	147		37° 23'	22	4 07	67° 53'	East

H.	K.	H.K.	Courses.	Winds.	L. W.	Remarks
1	8		E 1/2 N	NW		Sept 24th 1819
2	8	5				Ship under double reefed
3	8	5				top sails.
4	8	5				At 5 P.M. took in the mizen
5	9					on.
6	9			West		At 10 P.M. double reefed
7	7	5				F & M. top sails & hauled
8	7	5				M. sail.
9	8					At 5 A.M. let a reef out
10	7					of fore & main top sails
11	7					Better part strong gales
12	8	5		NW		& clear weather.
1	8	5				
2	8					
3	9					
4	9					
5	8	5				
6	9	5				
7	8	6				
8	8					
9	9					
10	9					
11	9					
12	9					

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
N 67 E	203	1° 19'	184		30° 04'	22	3° 52'	71° 45'	

Thirum Putnam Master

China from Seyhorn towards Calcutta

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	9	3	E by N	W		Sept 25 th 1819
2	9	5				Commences with strong
3	9					gales and clear weather.
4	9	5				At 4 P.M. close reefed fore
5	8	5				top sail.
6	8	7				At 11 P.M. took in the Mizzen
7	8					
8	8	5				
9	8	5				
10	9					
11	9			W		
12	9					
1	9					Middle part strong gales
2	9	5				& cloudy.
3	9	5				At 6 A.M. set the Mizzen
4	9	5				turned a reef out of the T. Sail
5	9	5				
6	8					
7	8					
8	8	5				
9	8	5	E by N	W		At 8 ³⁰ let a reef from M T. Sail
10	8	5				& set M. T. C. sail.
11	8	5				
12	8	5				

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
N 63 E	210	"35	187		34° 30'	20	3° 48'	75° 33'	East

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	8		E by N	W		Sept 25 th 1819
2	8	5				Strong breezes & clear we
3	8	5				ather & a high following
4	8	5				sea.
5	8	7				
6	8	6				
7	8	5				
8	8	5		W		At 8 P.M. took in M top
9	8	5				gal sail & double reefed
10	8	6				the top sails.
11	8					
12	8					
1	8					
2	8					
3	8	5				Latter part pleasant
4	8	5				let a reef from the top sails
5	8			W		& set top gal sails.
6	8	5				
7	8					
8	8	5				
9	8					
10	8	5				
11	8					
12	8					

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
N 51 E	200	2° 00'	155		32° 23'	19	3° 06'	78° 39'	E

Ship China

China from Leghorn towards Calcutta

H.	K.	H.K.	Courses.	Winds	L.W.	Remarks
						Sep. 27th 1819
1	8	5	ENE	NW		At 2 P.M. took in main topmast staysail At 4 took in main top gal sail. At 10 took in fore & main top gal sail At 11 P.M. freshening & squally double reefed the top sails. At 1 A.M. took in the jib At 2 reefed main sail. At 5 close reefed the top sails. At let a reef from the topsail
2	8	5				
3	8	6				
4	9	6				
5	8	6				
6	9					
7	9					
8	9					
9	8					
10	9	6				
11	9					
12	8	5				
1	9	6	NEBESE			
2	9	4				
3	9					
4	9					
5	9					
6	9					
7	9					
8	9			NW		
9	8	5				
10	8					
11	7	6				
12	8					

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
N 52 E	210	2° 12'	163		30° 10'		3° 10'	81° 49'	East

H.	K.	H.K.	Courses.	Winds	L.W.	Remarks
						Sep 28th 1819
1	7		NE by E	NW		Strong gales and heavy squalls At 10 P.M. set main sail & spanker Middle part more moderate turned out all reefs and sent up Royal yards. Latter part warm pleasant weather set staysails.
2	7					
3	8					
4	8	5				
5	7	5				
6	7	5				
7	7	7				
8	6					
9	7	5				
10	7	5				
11	7	5				
12	7	6				
1	7					
2	7					
3	6	5				
4	7			SW		
5	7					
6	7					
7	7					
8	6					
9	4		NE by E & SE			
10	4					
11	4					
12	3					

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
N 53 E	15	1° 34'	125		28° 36'		2° 23'	84° 12'	

Hiram Putnam Master

China from Leghorn towards Calcutta

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	2	5	NE by E	SE by E		Begins with light airs and pleasant weather bent a new foresail.
2	2	5				
3	2	5				
4	2	5				
5	2					
6	3		NE			At 6 P.M. set staysails
7	4					
8	5					
9	4					
10	5					
11	6			NW		Middle and latter parts moderate breezes and pleasant.
12	5					
1	6					
2	7					
3	7	5				
4	7					
5	7	5				
6	7					
7	7	5				Var. per az 7° 17' West.
8	7					
9	6	6		WSW		
10	6					
11	6	5				
12	6					

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
N 51° E	125	1° 29'	97'		27° 17'	7	1° 50'	86° 2'	

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	6	6	NNE	WSW		Commences with moderate breezes and pleasant
2	6	5				
3	6					
4	6	5				
5	6	6				
6	5	7	N by E	WSW		At 10 P.M. took in studding sails & staysails.
7	5					
8	4	5				
9	4	5				
10	4					
11	3					
12	4	5		N.W. by N		Middle and latter parts light breezes & pleasant
1	4					
2	4		NE by E			
3	3	5				set studding sails
4	3	5				
5	5		N by E			
6	6					
7	5					
8	5		N by E			Var. per az 5° 45'
9	4	5				
10	4					
11	4					
12	3	5				

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
N 13° E	116	2° 00'	27'		25° 17'	6	1° 30'	86° 32'	

Ship China

China from Leghorn towards Calcutta

H.	K.	H.K.	Courses.	Winds	L.W.	Remarks
1	4	5	NBE	NWSE		Oct 1st 1819
2	5					
3	4	5				Commences with moder-
4	4					ate breezes and clear we-
5	3	5				ther.
6	3	5				
7	3					
8	4					
9	3					
10	3					Middle part light breezes
11	3					and passing clouds.
12	2			SW		
1	3					At 5:30 A.M. set fore top
2	3					mast standing sail.
3	2	5				
4	2					At 7 A.M. set top gal stru-
5	2					ding sails
6	2					
7	2	5				Unbent main & mizen top
8	2	5				sails.
9	2					
10	2			East		
11	1	5				
12	1					

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
N 17 E 69		1° 00	20		24° 11	5° 26	22	86° 54	

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	1		N by E	East		Oct 2d 1819
2	5					Begins with light airs
3	5		NW	NE		and variable.
4	5					
5	5		N by E			
6	5			variable		
7	5					
8	2	5				Middle part moderate
9	3					breezes & cloudy.
10	3					
11	3					
12	2					
1	4	5				
2	4	6				
3	4					
4	4					
5	4					
6	5			SE		Ends with pleasant
7	5	5				weather.
8	6	6				
9	6	5				
10	6					
11	7					
12	6					

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
N 6 E 87		1° 26	9		22° 34	5	10	87° 04	

Hiram Putnam Master

China from Leghorn towards Calcutta

H.	K.	H.K. Courses.	Winds.	L.W.	Remarks
1	7	N by E	East		Commences with moder-
2	7				ate breezes and passing clo-
3	6				uds.
4	6				At 9 P.M. took in top gal
5	6				studdingsails & main royal
6	7				At 11 P.M. took fore royal
7	7				& main top gall stay sail
8	7				
9	6				
10	7				
11	7				
12	7				
1	7				
2	7				
3	7				
4	7				
5	8				Squally at 5 A.M. took in
6	7				main royal & flying jib
7	7				Var per ω m 4° West.
8	7				
9	7				
10	7				
11	8				
12	7				

There is a strong appearance of a current for several days past.

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
N 78° 17' 3"	2° 51'	21'			19° 46'		22'	87° 26'	East

H.	K.	H.K. Courses.	Winds.	L.W.	Remarks
1	8	NBE	East		Begins with fresh tra-
2	8				des and pleasant wea-
3	8				ther.
4	8				At 6 P.M. took in stu-
5	8	5			dingsails & playsails.
6	8				
7	8				
8	8	5			
9	8	5			
10	8				
11	8	5			
12	8	5			
1	8	5	ESE		Middle part strong
2	8				breezes & cloudy.
3	8				
4	8	5			
5	9				Ends with strong
6	8	5			breezes & squally.
7	9				
8	8	5			
9	8				
10	8				
11	8				
12	8				

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
NBE	198'	3° 17'	24'		16° 28'	4'	26'	87° 52'	East

Ship China

China from Leghorn towards Calcutta

H.	K.	H.K.	Courses.	Winds	L.W.	Remarks
1	8		N by E	E by S		Oct 5 th 1819
2	8					Commences with strong
3	8					breezes and clear weather.
4	8					
5	8	5				
6	8	6				
7	8	5				
8	8	5	N 1/2 E			At 5 ^h 30 P. M. set main
9	8	7				topmast staysail.
10	8	3				
11	8	6				
12	8	5				
1	8					Var. fell again at 5 ^h 22 P. M. 2 ^o 04 ^h
2	8	5				At 9 P. M. set M. topmast
3	8	5				studdingsail
4	8	5				At 7 ^h 4 M squally took in
5	8					fore top mast studding sail &
6	8					U. T. G. sail.
7	8					
8	8					
9	8	5				
10	8					
11	8	5				
12	8					

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
N 5 E	198	3 ^h 17	17		13 ^h 10		18	88 ^h 10	

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	7		N 1/2 E	E by S	3	Oct 6 th 1819
2	7					Begins with strong
3	7					ades and passing clouds
4	7	5				
5	7	5				
6	7	5				
7	7					
8	8	5				Middle part squally
9	7					took in and made sail
10	7					as necessary.
11	7					
12	7					
1	8					
2	7	5		E by N		
3	7					
4	7	5				
5	7					
6	7	5				Ends moderate & cloudy.
7	7					
8	4					
9	6					
10	7					
11	7					
12	7					

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
N 4 E	171	2 ^h 51	06		10 ^h 19	1	00	88 ^h 10	

Thuram Putnam Master

China from Leghorn towards Calcutta

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	5		N by E	E by N		Oct 7th 1819
2	5					Beginns with moderate
3	5	5				breezes and cloudy
4	5					
5	5	5	North			
6	5					
7	7					
8	7	8	N 1/2 E	ESE		Var. per azim at 4 PM 23 East
9	7					At 7 PM took in fore &
10	5					main top gall. sails.
11	5					
12	5					
1	5					
2	5	5				
3	5	5				
4	6					
5	6	6				
6	5	7				Ends moderate breezes
7	5					& pleasant weather
8	5			E by N		
9	5	5	N by E			
10	5					
11	5	5				
12	6	5	N 1/2 E			

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
N 4 E	136	2° 14'	4		8° 13'		19	88° 19'	

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	5	5	N 1/2 E	E by N		Oct 8th 1819
2	5					Beginns with moder-
3	5	5	North			ate and clear pleasant
4	5					weather.
5	5		N by E	ESE		
6	5					
7	6	3				
8	6					
9	6	5				
10	6		N 1/2 E			Middle part moderate
11	6		N by E			and cloudy.
12	6					
1	6					At 7 A.M. set royals.
2	5					staysails & F T Mast
3	5	5				standing sail.
4	5	5				
5	5	5		East		
6	5	5				
7	5	5				
8	5	5				
9	5					
10	4					Ends moderate breezes
11	4	5				
12	5					

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
N 5 E	130	2° 04'	12		0° 04'	1° E	12	88° 31'	

Ship China

China from Leghorn towards Calcutta

H.	K.	H.K.	Courses.	Winds	L.W.	Remarks
1	4		N by E	East		Oct 9 th 1819
2	4	5				Commences with light
3	4	5				breezes and pleasant we-
4	4	5				ather.
5	5	5				
6	5					
7	6					
8	6			E by S		At 4 P.M. set top gall
9	5	7				standing sails.
10	6					
11	5	5				
12	5	5				
1	5	5		ESE		Middle part moder-
2	6	5				ate and cloudy
3	6					
4	6					
5	6			SE		At 7 A.M. set lower sta-
6	6					ding sail
7	6	6				
8	6	6				ends hazy.
9	6					
10	6					
11	6					
12	6					

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
N 12 E	133	2° 10'	17		5° 3'	1	17	88° 48'	

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	7	5	NNE	SE		Oct 10 th 1819
2	6	5				These twenty four hours
3	6					moderate breezes & pleasant
4	6					all necessary sail set.
5	5	6				
6	6					
7	6					
8	6					
9	6	7				
10	6					
11	6					
12	4					
1	4	5				
2	3					
3	3					
4	3					
5	2	5				
6	3	5				
7	2	6				
8	3	5				
9	3		N by E			
10	2					
11	2					
12	2					

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
N 17 E	129	1° 54'	30		2° 02'	10	30	89° 18'	

Thuram Putnam Master

China from Leghorn towards Calcutta

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	2	5	Nby S P E			Oct 11th 1819
2	2					Begins with light bree
3	1	5				zes and pleasant weather
4	2	5				
5	2	5				
6	4		North by E			At 2 P.M. set larboard lower
7	4	3				studingsail & M. T. G. studysail.
8	3	5				
9	4					
10	4	5				At 5 P.M. jibed ship set
11	4					larboard T. T. mast & T. G.
12	5					studingsails.
1	4	5				
2	5			W by S		Var per azm 2° 10' East
3	6					
4	6					At 1 P.M. took in studg
5	6					sails & set jib & staysail
6	6					
7	5	7				
8	6					
9	5	5				
10	6					
11	6	5				
12	6	6				

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
N 2 E	110	1° 50'	4		13 South	" 4'	89° 22' E		

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	6	5	North W by S			Oct 12th 1819
2	6	5				First part good breezes
3	7					& pleasant weather.
4	7					
5	7	5				At 9 P.M. took in royals
6	7	5				& T. G. studg sails
7	7	5				
8	8					Middle part fresh breez
9	7					reefed mizzen T. sail.
10	8	3				
11	8	3				
1	8	3				
2	8	5		W by N		
3	9					Ends with strong bree
4	9					zes & hazy weather.
5	8					
6	8					
7	8					
8	8					
9	8					
10	8					
11	9					
12	9					

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
N 5 E	194	3° 14'	10		3° 01' N 3° E		10	89° 32'	

Ship China

China from Loughorn towards Calcutta

H.	K.	H.K.	Courses.	Winds	L.W.	Remarks
1	8	5	North	WSW		Oct 13 th 1819 ~
2	5	3				Beginns with strong
3	9	3	N by W			breezes and squally.
4	8	5	N			At 4 P.M. took in T.C.
5	6	5				sails double reefed fore &
6	7					single reefed main tops
7	7	5	N by W	WSW		sails
8	8					
9	7					
10	7	5				
11	6	5				
12	7	5				
1	7					At 6 P.M. strong breezes
2	7					& heavy squalls close reef
3	8	5				top sails handed at
4	7	5				sail & jib
5	7					
6	7					At 4 A.M. set reefed at sail
7	7					let a reef from at T.C. sail &
8	7					
9	6	7				
10	6	7				
11	7	5				
12	7	5				

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
N by W	178	2° 50'	20'		5° 55'	4	20	89° 12'	East

H.	K.	H.K.	Courses.	Winds	L.V.	Remarks
1	7		N by W	WSW		Oct 14 th 1819 ~
2	7	5				Squally sent down Roy
3	7					al yards.
4	7					
5	6	5				At 5 A.M. saw a Brig
6	6					standing to the S. & E.
7	6	6				At 6 A.M. turned a reef
8	6	4				out of the top sails & sh
9	7					anher
10	7					
11	7					
12	7					
1	7					
2	7					
3	7	5				
4	6					
5	7	5				
6	7					
7	7	5				
8	7					
9	7					
10	6					
11	6	5				
12	6	5				

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
N by W	166	2° 45'	17'		8° 40'	5	17	88° 54'	

Hiram Putnam Master

China from Leghorn towards Calcutta

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	7	5	N by W	WSW		Oct 15 th 1819 ~
2	6					Begins with strong breeze and heavy squalls.
3	8		N by E	SW by W		
4	3					
5	6	5				At 4 P.M. close reefed fore & main topsails & double reefed spanker.
6	6	5	N by W			
7	7					
8	6					
9	7					
10	6	5	W by N			
11	6	5				
12	6	5				
1	6					Middle part heavy squalls with lightning
2	7					
3	7					
4	6	7				
5	7					Latter part sent down tops gall yards & masts.
6	7	5				
7	7					
8	6	5				
9	6	5				
10	6	5				
11	6	5				
12	6	7				

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. by D. R.	Long. by Ob.
N 59° W	160	2° 39'	15		11° 17'	5	15	88° 00'	

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	7		N by W	West		Oct 16 th 1819 ~
2	7					Strong gales & heavy squalls with a high short sea
3	7					
4	7					
5	7	5	NNE			
6	3					
7	3		N by W			At 7 P.M. a heavy rain hurried the M sail
8	5					
9	6					
10	6					
11	6					Middle part squally took in & made sail as necessary
12	6					
1	6					
2	5	5				
3	7	5				
4	7	5				
5	8					
6	8					
7	8					
8	7	5				Staked the Anchors &
9	7					
10	7					
11	7					
12	7					

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. by D. R.	Long. by Ob.
N 8° W	146	143	20		13° 40'	3	21	88° 09'	

Ship China

China from Leghorn towards Calcutta

H.	K.	H.K.	Courses.	Winds	L.W.	Remarks
1	8		S by W S W			Commences with strong
2	7	6				breezes & passing clouds
3	7	6				Var per azm 3.56 East
4	7	6				At 7 P.M. handed M sail
5	7	5				at 11 P.M. took in the
6	7	5				spanker
7	7	5				At 8.30 A.M. let a reef
8	6	6				from fore & main tops
9	7	5				sails & set the jib.
10	7	5				Bent the cables.
11	7	5				
12	7	5				

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
N 14° W	170	2° 41'	40'		10° 30'		42'	87° 39'	

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	6		N W S S W			These twenty four hours
2	6					fresh breezes & cloudy
3	8					weather
4	7	5				
5	7	5				
6	7	5				
7	7	5				
8	7	5				
9	7	5				
10	7	5				
11	7	5				
12	7	5				
1	7					At 7 A.M. let a reef from
2	7					the topsails.
3	7					
4	7					
5	7	5				
6	8					
7	8					
8	8					
9	8					
10	7	5				
11	8	5				
12	8	5				

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
N 41° W	181	2° 10'	118'		18° 37'	4'	2° 4'	85° 34'	

Thram Putnam Master

China from Leghorn towards Calcutta

H.	K.	H.K. Courses.	Winds.	L.W.	Remarks
1	8	NWB	N		Commences with strong
2	8				breezes & squally.
3	8				At 3 P.M. took in U.T.
4	7	5			mast staysail.
5	7				At 10 P.M. struck sound-
6	7	5			ings in 20 fathoms of
7	7	5			water: took in & made
8	7				sail as necessary.
9	5		P		At 7-30 made the land
10	0	NE by E			False Point bearing NW by W
11	0	5			
12	0	ENE			
1	3	ENE			
2	4	ENB			
3	7	5			
4	7	ENE			
5	7	NEBE			
6	7	NE			
7	7				
8	7	5			
9	6				
10	5	NEBN			
11	5				
12	4	NE			

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by
N 24 E 110	1 ^h 40'	44			20° 14'	4	47	86° 22'	East

H.	K.	H. K.	Courses.	Winds.	L. W.	Remarks
						Jan 21 st 1820
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						

[illegible]

Ship China

China from Calcutta towards Salem

H.	K.	H.K.	Courses.	Winds	L.W.	Remarks			
1	"			WNW		Jan 26 th 1820			
2	"					Commences with lig			
3	"					ht breezes & pleasant			
4	"			WSW		weather.			
5	"								
6	"		S by E						
7	"			N		At 3 P.M. the East sea			
8	"					reef buoy bore W.S.W.			
9	"					distance one mile.			
10	"								
11	"								
12	"								
1	3	5	South	NNE		At 8 P.M. discharged			
2	3	5				the Pilot had 8 fathoms			
3	3	5				of water.			
4	3	5							
5	5					At 9 P.M. set studding			
6	5					sails & stow sails			
7	4	5		ENE		At midnight the light ship			
8	4								
9	4								
10	3								
11	3								
12	2								
Course.	Dist.	Diff Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia	Diff. Long.	Long. by	Long. by Ob
S 89 E	44	1	44		20 14	38	16	88 00	00

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	2		South	NNE		<p>Jan 27th 1820</p> <p>Begins with light breezes and pleasant weather. Watch employed in unberding cables</p> <p>Var per azm 3.33 East</p>
2	2					
3	2	5				
4	2	5				
5	2	5				
6	3					
7	3					
8	3	5				
9	3					
10	2	5				
11	2					
12	2					
1	1	5				<p>Middle part light airs & pleasant</p> <p>Employed in getting in & unstocking the anchor</p>
2	1					
3	2	5				
4	2	5				
5	3					
6	2	5				
7	3					
8	3					
9	3					
10	3					
11	3					
12	3	5				

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
S 4 W	62	62	5	19 12	19 12	3.33	87 54	Long in	

Hiram Putnam Master

China from Calcutta towards Salem

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	4		S 2 E	NNE		Jan. 28 th 1820
2	4					These twenty four h
3	4					ours light breezes and
4	4					clear pleasant weather
5	3	5				
6	3					
7	3					
8	2					
9	2					
10	1	5				Var per ω^m 3 ³³ East
11	1	5				
12	1	5				
1	2					
2	1	5				
3	2					
4	3					
5	2					
6	1	5				At 11:30 A.M. took in the
7	1	5				stard and studd sails
8	2					
9	2					
10	2					
11	2					
12	2			E by N		

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
S 2 E	58	00 28	00 28	18 14	18 28	4	2	87 52	

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	2		S 2 E	NNE		Jan 29 th 1820
2	3	4				Light breezes and pleas
3	3	4				ant all standing sails
4	4					set.
5	4	3				
6	4	7				
7	5					
8	5			NE		
9	5					
10	5					At midnight moderate
11	4	5				and clear
12	4	5		E by N		
1	4	6				
2	4					
3	4					
4	5					
5	5					
6	5	8				Latter part steady bree
7	5					zes and pleasant
8	5	6				
9	5			East		
10	5					
11	5					
12	5					

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
S 2 E	111	111	4	16 37	16 22	4 E	4	87 56	

Ship China

China from Calcutta towards Salem

H.	K.	H.K.	Courses.	Winds	L.W.	Remarks
1	6		S 1/2 E	East		Commences with fresh
2	6	4				breezes and pleasant wea
3	6	7				ther all drawing sails
4	6	3				set
5	6	6				At 4 P.M. took in Mizzen
6	7			E by V		royal & Main stay sail.
7	7					
8	7					
9	7					
10	7	4				
11	7	5				
12	7					
1	7					Middle and latter parts
2	6	7				fine breezes and pleasant
3	6	3				
4	6					
5	6	5				
6	6	5				
7	6	5		E by E		
8	6	5				
9	6					
10	6	7				
11	6	5				
12	6	5				

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
S 3 E	159	159	8		13° 32'	3	8	88° 4'	

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	6	5	S 1/2 E	ENE		Begins with fresh br-
2	6					eezes and pleasant wea-
3	7					ther all necessary sail set
4	7					
5	6	7				
6	7					
7	7					
8	7					
9	6	5				
10	6	5				
11	6	5				
12	6	5				
1	7					Middle and latter par-
2	7					ts fresh breezes & pleasant
3	7	5				
4	7					
5	7					
6	7					
7	7					
8	7					
9	7					
10	7					
11	7					
12	7					

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
S 3 E	169	166	8	10° 46'	10° 46'	3	8	88° 1'	

Hiram Putnam Master

Whina from Calcutta towards Salem

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	7	8	S 1/2 E	ESE		This twenty four hours commences with fresh breezes and cloudy.
2	7					
3	7					
4	7					
5	6	5				
6	7					
7	7	5				
8	7					
9	7	6				
10	7	5				
11	7					
12	7	3				
1	6					Middle part steady breezes & cloudy. At 4.30 A.M. squally took in top gal. & Lower Studding sails flying jib & U. stay sails. At 7 A.M. set all light sails
2	6	5				
3	6	5				
4	7					
5	7					
6	7	5				
7	6	5				
8	7					
9	7					
10	7					
11	7					
12	7					

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
PSE	168	167	4	7°39	8°03	3	10	88°22	0000

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	6	5	SBE	ESE		Begins with fresh breezes & squally appearances all drawing sails set. At 8 A.M. squally took in studding sails, stay sails and fore & mizen top gal sails. Midnight sharp lightning single reefed the T. sails.
2	6	5				
3	6					
4	6					
5	6	5				
6	6	5				
7	6	5				
8	6	5				
9	6	3				
10	6					
11	6	5				
12	5	5				
1	0					Ends squally ship under single reefed top sails.
2	7	5				
3	7					
4	7	5				
5	7	5				
6	6	5				
7	6					
8	6					
9	6	5				
10	6					
11	5					
12	5					

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
Sy	151	150	18		15°29	48	18	88°41	

Ship China

China from Calcutta towards Salem

H.	K.	H.K.	Courses.	Winds	L. W.	Remarks
1	6	5	East	East		Feb 3 ^d 1820
2	5	5	South			Begins with breezes &
3	4	5				squally weather.
4	2					
5	2	5				
6	5			NNE		At 1 P.M. lowered the
7	3					reef from the M. sail &
8	2	5				sprinkled at 7 took in 4
9	1	5		Var		and mizen top of sails
10	1					at 11 in M. S. of sail
11	1					At midday put sharp lig
12	1					at 5 ³⁰ set 5 th of sails
1	4					at 7 took all reefs & set
2	4					light sails
3	3	5		ESE		Further 2 nd 3 rd 3 rd East
4	4	5				
5	3					
6	5					
7	4					
8	4	5		NE		
9	4	5				
10	4					
11	6					
12	5					

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
S 2 nd W	84	83	3		428	5 East	3	88.3	East

H.	K.	H.K.	Courses.	Winds.	L. W.	Remarks
1	5		South	N.E.		Feb 4 th 1820
2	5					Commences with mo
3	5					derate breezes and cloudy
4	5			E.NE		weather.
5	5					
6	5					
7	4					
8	3			East		At 6 P.M. squally took
9	1					in all light sails
10	1			ESE		
11	1					At midnight light
12	1					air and pleasant
1	1					
2	1					
3	1					
4	2		S 2 nd W	E.NE		
5	1					
6	1		S 2 nd W			
7	1					
8	1		S 2 nd W			
9	3		South	Var		
10	1					
11	3					
12	2					

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
S 2 nd W	61	60	8		352	N 2 nd E	8	88	49

Hiram Putnam Master

China from Calcutta towards Salem

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	3	5	South West			Feb 5th 1820
2	4		SE 2 E			Commences with light
3	5	5	South			breezes and cloudy weather.
4	6		W 3 S			
5	4					
6	4					
7	4					
8	3					At 3 P.M. took in the
9	2	5				royals, stay sails & flying
10	3					jit. At 3 ³⁰ set fore & all
11	3		West			royals. At 7 ³⁰ set stay
12	4					sails and flying jit.
1	3	5				Middle part cloudy.
2	4	5	SW			At 6 A.M. set all studding
3	5	5				sails.
4	5					Ends pleasant.
5	4					
6	4					
7	5					
8	4	5	W 3 S			
9	4	5				
10	4	5				
11	4	5				
12	6					

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
P 2 W 71	71	3			2 ⁴¹ N	2 East 3	88 ²⁶ East		

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	4		South	W 3 W		Feb 6th 1820
2	3	5				Begins with light
3	4					breezes and cloudy weather.
4	3					Here, all necessary sail
5	2					set.
6	2		W 3 S			
7	1	5				
8	1	5				
9	2					
10	2	5				
11	2		NW			Middle part moderate
12	2					breezes & pleasant.
1	2	5				
2	2					
3	2					
4	2					
5	2	5				Latter part pleasant.
6	1					
7	1					
8	1					
9	1					
10	1					
11	1					
12	1					

Course	Dist	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
P 2 W 44	40	2			1 ⁵³ N	2 East 2	88 ²⁴ East		

Ship China

China from Calcutta towards Salem

H.	K.	H.K.	Courses.	Winds	L.W.	Remarks
1	4		South	SE		Commences with light breezes and cloudy all necessary sail set.
2	3	5				
3	4	3				
4	3	3				
5	2	5				
6	2					
7	1	5				
8	1		SSW	SE		Middle part moderate and pleasant.
9	2					
10	2					
11	2					
12	2					
1	2					
2	2					
3	2					Batter part squally with rain took & made sail as necessary.
4	2					
5	2					
6	2					
7	2					
8	2		SW	SE		
9	2		SSW	Var		
10	3					
11	1	5	South			
12	1					

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
S 18 N	42	39	13	1 14			28 13	88 11	East

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	2	5	SE	SW		Begins with squally unsettled weather attended with heavy rain.
2	3					
3	2	5				
4	3					
5	3					
6	3	3				
7	3	5				
8	4					At 8 AM heavy squalls took in top of sails & reefed the top sails Middle part light air & calm.
9	4					
10	4					
11	3	3	South			
12	3					
1	1	5	SE			
2	1					
3						At 10 made all necessary sail Ends pleasant
4						
5	2					
6	3	5				
7	4					
8	4	5				
9	4	5				
10	3					
11	2					
12	2					

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
23	62	57	24				14 28 24	88 38	East

Thiram Putnam Master

China from Calcutta towards Salem

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	4	5	SE	SSW	2°	Begins with moderate breezes and passing clouds all necessary sail set At 5 P.M. took in the staysails.
2	4	5				
3	5		SEBE	SSW		
4	5					
5	5					
6	4	5				
7	5		SE 1/2 E			
8	4	5				
9	4	5	SE 1/2 S			
10	4					
11	4	5	SEBE	SSW		Middle part took in the fore and mizen top gal sail. Ends squally and small rain
12	4	5				
1	5		SE			
2	4					
3	4	5				
4	5					
5	5	6	SE 1/2 E			
6	5					
7	5	3				
8	5	3				
9	5	5	SE			
10	4	5				
11	5					
12	5					

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
S 42 E	110	81	74		1° 12' S	2°	74	89° 49'	East

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	5		SE 1/2 E		2°	Begins with moderate breezes and passing clouds all necessary sail set
2	4			SSW		
3	5		SE			
4	6					
5	5	5	SE 1/2 E			
6	5	7				
7	3	5	S			
8	3	5				
9	4		SSW			
10	4					
11	4	5	SSW	West		Middle part moderate breezes and squally took and made sail as necessary Latter part pleasant At 7 set staysails &c
12	4	5				
1	5	5				
2	5					
3	5					
4	5					
5	4					
6	4					
7	5					
8	5					
9	3	5				
10	3	5				
11	3	5				
12	3		SE			

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
S 11 W	88	86	17		2° 38'	2	17	89° 32'	87° 40'

Ship China

China from Calcutta towards Salem

H.	K.	H.K.	Courses.	Winds	L.W.	Remarks
1	4	5	SPW	W 2		Begins with moderate breezes.
2	5					
3	4	7				
4	4					
5	4		SPB	W 3		
6	3	3				At 6 ³⁰ squally took in the royals flying the stay sails.
7	5					
8	4	5	SPB	W		
9	5					
10	5		SPB	W 2		
11	4					At 4 ³⁰ heavy squall took in T. G. sails and M sail.
12	4		SPW	West		
1	5	5				
2	6					
3	5					
4	5					Ends strong breezes and passing clouds.
5	5					
6	3	5	SPB	W		
7	2		SPW			
8	2	5				
9	4	5	SPB	W		
10	4	5	SPW			
11	5		SPB	W 2		
12	5		SPB	W		

Course. Dist. Diff. Lat. Dep. Lat. by D. R. Lat. by Ob. Varia. Diff. Long. Long. in Long. by Ob.

SPW 117 112 32 4³⁰ 2 East 33 87⁰⁷ 88⁵⁹ East

H.	K.	H.K.	Courses.	Winds.	Remarks
1	4	5	SPB	W 3	These twenty four hours moderate breezes and passing clouds.
2	5				
3	5		SPB	E 2	
4	5				
5	5				
6	5				At 7 A.M. set the sky-sail.
7	4		S		
8	4				
9	4	5			
10	4	5			
11	4	5	SPB	W	
12	4	5			
1	4	5	SPW		
2	3				
3	3		SPB	W	
4	3	5			
5	3		SPW		
6	3				
7	3				
8	2	5			
9	2	5	S		
10	2	3			
11	2		SPB		
12	2				

Course. Dist. Diff. Lat. Dep. Lat. by D. R. Lat. by Ob. Varia. Diff. Long. Long. in Long. by Ob.

SPW 88 88 3 5⁵⁸ 3 88¹⁰ East

Thirum Putnam Master

China from Calcutta towards Salem

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	3		S 2 E	SMBW		Commences with light
2	3					breezes and pleasant we
3	3	5	SBE	SW		ather, all drawing sails
4	3					set.
5	3					
6	3		SSE			
7	3					
8	3		SBE	SMBW		Var per azm 1° 27 East
9	2	7				At 10 ³⁰ took in the stay
10	2	5				sails and skysail.
11	2		S	MSW		
12	3					Middle parts light air
1	3		S	MSW		
2	3					
3	1	5	SSE			
4	1	5				
5	1		S			
6	1	5				
7	1		SMBW			
8	1	5				At 5 A.M. set staysails
9	0					& skysails.
10	1		SBE			
11	1					
12	0					

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
S 2 E	47	47	5		6° 50'	2°	5	88° 2'	East

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	0		SBN			This day commences
2	0					with very hot weather
3	1			West		and calm.
4	1	5				
5	2	5				
6	2	5				
7	2			MSW		
8	2					
9	2					Middle part light air
10	1	5				& pleasant.
11	1					
12	1	5				
1	2					At 6 A.M. set the T
2	2					& M. T Mast, Lower &
3	2					T G. Studg. sails Stay sail
4	2					to.
5	2					
6	2					
7	2					
8	2					
9	2	5				Ends pleasant.
10	2	5				
11	2	5				
12	2	5				

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
S 2 W	42	39	16		7° 42'	-	16	88° 05'	East

Ship China

China from Calcutta towards Solum

H.	K.	H.K.	Courses.	Winds	L.W.	Remarks
1	3		SSW	SWW		Feb 15 th 1820
2	3	5				Commences with light air
3	3					and pleasant weather.
4	3					
5	3	5				At 5 A.M. set larboard Low-
6	3	5				er striding sail.
7	3	5				
8	3	5				At 8 P.M. squally took
9	3	5				in the striding sails M.
10	2	5				royal & T. G. sail.
11	1	5				
12	1	5		East		
1	1		SSW			
2	1		SSW			
3	1		SSW			
4	1			Calm		At 11 P.M. took in the
5	1					F. & Main T. G. sails.
6	1	5		SWW		
7	2					Middle part light air
8	2					
9	2	5				At 5 A.M. made all sail.
10	2	5		SENE		
11	2					
12	2	5				

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
S 22° W	54	50	20		8° 41' S		20	87° 45'	East

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	2	5	SSW	ESE		Feb 16 th 1820
2	2					Begins with moderate
3	4					breezes, cloudy weather all
4	4	5				necessary sail set.
5	5					Got down the M. T. G.
6	5	4				yard and shifted the sail
7	5	5				Midnight squally took in
8	5	5				sail as necessary.
9	4	5				
10	4	5				
11	3	5				
12	2	5				
1	2					
2	1					
3	3			North		
4	4					
5	1	5		SWW		
6	1			East		
7	1					
8	1			ESE		
9	1	5				
10	0			Calm		
11	1					
12	1	5		S.E.		

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
S 22° W	62	62	25		9° 30' S		26	87° 19'	

Hiram Putnam Master

China from Calcutta towards Salem

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	2	5	SSW SE			Feb 17 th 1820
2	4					Begins with light breeze
3	5					and passing clouds.
4	5	5	SWB SE			At 7 took in the F & M
5	5		SW			Royals & flying jib & staysails
6	5		SW			
7	5		SSW SE			
8	5	5				
9	5		SWB			
10	5	5				
11	5					Middle part moderate
12	5					& cloudy
1	4					
2	4	6				At 3 A.M. set F. T. M. sta
3	5			SSE		ding & at 5 T.G. study sail
4	4	5				At 7:30 took in T.G. study
5	3	5	SWB			sails & T.G. sails
6	4	5	SW	North		Latter part main sail
7	2					
8	5		SW			
9	4	5				
10	1		SWB			
11	1					
12	2					

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
S 33 ^W	101	85	55	11 ⁰⁷			17 ⁵⁰	86 ²³	West East

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	1		SWB East			Feb 18 th 1820
2	1					Commences with light
3	1					airs & calm
4	1	5	SW			At 4:30 P.M. took in
5	5	5				the Royals and flying jib
6	6	5				At 6 took in the T.G.
7	7	4	SWB SE			sails and reefed the T sails
8	6	5				Middle part fresh breezes
9	6		SW			& cloudy
10	6	5				At 7 A.M. turned the reefs
11	6	3				from the T sails, set top
12	6	6				gal sails & royals & study sails
1	6	5				
2	6	6				
3	7	5				
4	7					
5	7					
6	6					
7	6					
8	7					
9	6	5				
10	6	5				
11	6					
12	6					

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
S 42 ^W	136	107	91		12 ⁴⁹	1 ²	93	84 ⁵⁴	East

Ship China

China from Calcutta towards Salem

H.	K.	H.K.	Courses.	Winds	L. W.	Remarks
1	7		SW	SE		Feb 19th 1820
2	7					Begins with strong
3	7					trades and passing clouds
4	7					At 5 P.M. took in top gal
5	6	5				striding sails.
6	6					At 9 P.M. squally took
7	6					in sail, & at 11 made
8	6					all sail
9	7	5				Middle part strong
10	7					breezes & passing clouds
11	7	6				Var. per azm 2° 02' W
12	7	6				Latter part strong breezes
1	7					& passing clouds.
2	7	6				
3	7	6				
4	7	6				
5	7					
6	7	5				
7	7					
8	7					
9	7					
10	8					
11	8	6				
12	8	5				

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
S 44° W	160	119	115		14° 50'		1° 58'	82° 52'	East

H.	K.	H.K.	Courses.	Winds	L. W.	Remarks
1	6	7	SW by N	SE by E		Feb 20th 1820
2	6	5				Begins with strong
3	7					trades and good weather all
4	7					drawing sail set.
5	7					
6	6	6				
7	6	5				
8	7			East		
9	7					
10	7					Middle part strong bree-
11	7	3				zes & light squalls, took
12	7	6				in T & G studding sails.
1	8					
2	8					
3	7					
4	7					
5	7	5				
6	8					Ends with strong bree-
7	8	5				zes and squally appearan-
8	8					ces.
9	7	5				
10	7	5				
11	8					
12	7	5				

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
S 54° W	176	103	142		16° 37'	S 2° 28'	2° 28'	80° 24'	East

Phiram Putnam Master

China from Calcutta towards Salem

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks	Feb 21 st 1820				
1	8		SWB	SEB		Commences with strong	At 2 P.M. took in the fore Royal & M. top gal staysail.				
2	8					breezes and squally aft.					
3	7					parances					
4	7										
5	6	5		ENE							
6	5	5									
7	6	3									
8	6	5									
9	6	5									
10	7										
11	7										
12	7	5									
1	7					At 3 ³⁰ P.M. took in	the Lower F.T.M. studd sail the M. Royal & F & M. T.C. sails. At 8 P.M. reefed top sails. At 10 A.M. set Lower & F.T.M. studd sails				
2	7	5									
3	8										
4	8			EB							
5	7	5									
6	7										
7	7	5									
8	7	7									
9	7										
10	7	5									
11	7										
12	7	5									
Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.		
S 54 ^W	172	1 ⁴¹	139		18 ¹⁸	2 ^W	146	77 ⁵⁸			

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks	Feb 22 ^d 1820.				
1	7		WSW	EB		Begins with strong	All Hands employed in setting up the rigging				
2	7	5				ades and cloudy.					
3	6	5									
4	7	6									
5	7										
6	6	6									
7	7	5									
8	7	5									
9	8										
10	8										
11	7	5									
12	8										
1	8	4				At midnight fresh	breezes and squally				
2	8										
3	8										
4	8	4									
5	8										
6	8										
7	8										
8	8										
9	8										
10	8										
11	8										
12	8										
Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.		
S 64 ^W	183	82	163		19 ⁴⁰	3 ^W	2 ⁵³	75 ⁰⁵	East		

Ship China

China from Calcutta towards Salem

H.	K.	H.K.	Courses.	Winds	L.W.	Remarks
1	7		W B S 1/2 S			Feb 23d. 1820
2	7	6		E S E		Begins with fresh trades
3	6					and squally.
4	7					At half past meridian
5	8					took in the T. Royal and
6	7					M. T. G. sail.
7	8					At 5 took in the F. T.
8	8					M. sludg sail & T. T. G. sail
9	8	5				Middle & latter parts
10	7	5				strong breezes and squally
1	7					
2	7					
3	7					
4	7	8				
5	7	8				
6	8	5				
7	7	5				
8	7	5				
9	7	5				
10	7	6				
11	7	6				
12	7	7				

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
68 1/2	181	68 1/2	168 1/2	20 48		5 1/2	179	72 06	East

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	7		W B S 1/2 S East			Feb 24 th 1820.
2	8					Strong breezes continues,
3	7	5				ship under single reefed
4	7	5				top sails.
5	7	5				Watch employed in m
6	8	5				acking points &
7	7	5				Middle part strong
8	7	5				breezes and cloudy.
9	7					At 2 30 A.M. set the F
10	7					& M. T. G. sails.
11	7					Var per azm 6 58 West
12	7					
1	7					
2	7					
3	7					
4	7	5				
5	7	5				
6	8					
7	7					
8	7					
9	7					
10	7					
11	7	5				
12	7					

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
66 1/2	175	72 1/2	164				172	69 14	East

Hiram Putnam Master

China from Calcutta towards Tulem

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	7	3	W B S E B S			Feb 25 th 1820
2	7	5				Begins with fresh breeze
3	7	4				passing clouds and hazy w th
4	7					ather, ship under single reef-
5	6	7				ed top sails.
6	7					
7	7	3				
8	6	5				
9	6					
10	7					
11	6	5		E S E		Middle part strong breeze
12	7					& heavy sea.
1	7	5				At 5:30 A.M. out all reef
2	7	3				set fore & main royals.
3	7	5				At 7:30 set F. T. M. sludg.
4	7	5				sail. Var 9:00 West.
5	7					O. B. head of the sea 1 pt. W.
6	7	5				
7	7					
8	7	3	West			
9	7					
10	7	5				
11	6	5				
12	7					

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
S 72 th W	194	61.9	185	23.07			9 th 207	65.53	East

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	7		West E B S			Feb 26 th 1820
2	7					Begins with strong
3	7	3				trades and pleasant we-
4	7					ather & heavy sea; all
5	7	3				necessary sail set.
6	7	5				
7	7					
8	7					
9	7					
10	6	6				Middle part moder-
11	6					ate breezes and passing
12	6	5				clouds
1	5	5				
2	5	5				
3	5					
4	5					
5	6					
6	6	5				Ends pleasant
7	6					N B head of the sea one
8	6	6				mile N W.
9	6					
10	7	6				
11	6					
12	7					

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
S 81 th W	182	29.9	180 th				23.41	9 th 195	42.38 East

Ship China

China from Calcutta towards Salem

No.	K.	H.K.	Courses.	Winds	L.W.	Remarks
1	7	3	West	ENE		Commences with stea
2	7					dy breezes and pleasant
3	7					weather with a high
4	7	5				following sea for which
5	7					I allow one mile per hour.
6	7					
7	7					
8	7	5				
9	6	5				
10	6					
11	6					
12	6			East		At 1 P.M. set Larboard M.
1	7	5				T.M. studding sail.
2	6	5				At 6 P.M. took in the
3	6					T.T. G. sail.
4	7					
5	7	6				At 9 P.M. set the star
6	7					board M T.M. studding sail
7	7	4				
8	7					
9	7					
10	7	5				
11	6	5				
12	6					

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
S 79° 24' E	160	35	181		24° 20' 11"	198	59° 20'	East	
	+ 24'								

No.	K.	H.K.	Courses.	Winds	L.W.	Remarks
1	6		W 1/2 N East			These twenty four ho
2	6					urs moderate breezes &
3	6					pleasant weather & a
4	6	5				long following sea for
5	6					which I allow ten miles
6	6	5				
7	6					
8	6					
9	6			ENE		
10	6					
11	7					
12	7					
1	6					
2	6					
3	5	5				
4	5	7				
5	5					
6	5					
7	5					
8	5					
9	4					
10	4	5				
11	4	5				
12	4	5				

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
S 84° 24' E	147	168	140		24° 42'	11° 20'	160	56° 40'	East

Hiram Putnam Master

China from Calcutta towards Salem

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	5		W 2 1/2 E	E B		Commences with moderate breezes and passing clouds and a long following sea, all necessary sail set.
2	5					
3	5	5				
4	5			E N E		
5	4					
6	4					
7	4					
8	4					
9	4					
10	3	6				
11	4					At 10 P.M. set Lar. M. S. G. and Lower studd sail
12	4			East		
1	4					
2	4	5				
3	4	5				
4	4	3				
5	4	3				
6	4	5		E B S		
7	5					
8	5					
9	5					
10	6	5				
11	6					
12	7					

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
57 1/2	123	13 S	12 1/2		25° 05'	12 1/2	138	54° 22'	East

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	7		West	E B S		Begins with strong breezes and passing clouds and heavy and long sea, for which I allow fifteen miles.
2	7					
3	7					
4	6	7				
5	6					
6	6					
7	6	8				
8	6		W B S			
9	6	4				
10	6	4				
11	6	4				
12	6	4				
1	6	5				Middle & latter parts strong breezes & passing clouds.
2	6	5				
3	6	5				
4	6	5				
5	6	5				
6	6					
7	6	5				
8	6	5				
9	6	5				
10	6					
11	6					
12	6					

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
57 1/2	171	50	16 1/2		26° 20'	13 1/2	181	51° 21'	East

Ship China

China from Calcutta towards Salem

N.	K.	H.K.	Courses.	Winds	L. W.	Remarks
1	6	5	W B N	E B N		Mar 2d 1820
2	6	5				Begins with strong breeze
3	6	5				and passing clouds and
4	6	5				a long following sea for
5	6	7		East		I allow it set us fifteen
6	6	3				miles
7	6	3	West			
8	6	5	W B N			
9	6	5				
10	6	7				
11	6	3		NE B E		At 8 P.M. set the Lar. T. T.
12	6	5				M. stud? sail.
1	6	5				
2	7			East		
3	7					
4	7					
5	7					
6	7					Ends with strong breezes
7	7					and cloudy.
8	6	7				
9	6	5				
10	6	5				
11	7					
12	7	5				

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
By 3 W	171	48	163	27° 09' N		20° W	180	48° 20'	East

H.	K.	H.K.	Courses.	Winds.	L. W.	Remarks
1	7	6	W B N	NE B S		Mar 3d 1820
2	6	5				Commences with strong
3	6	5				breezes and passing clouds
4	6	5	West			and a following sea for
5	6	3				which I allow fifteen miles
6	6	5				dues West.
7	6	5	W B N			
8	7					
9	7					Var 19° West per arm
10	7					
11	7			East		
12	7					
1	6	5				
2	6	3				
3	6	5				
4	6	7				
5	7					Ends with pleasant
6	7					breezes and mackerel sky
7	7					all necessary sail set.
8	7					
9	7	4				
10	7	5				
11	7					
12	7					

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
By 1 W	171	83	150		28° 10' S	19° W	170	45° 30'	East

Thuram Pulnam Master

China from Calcutta towards Salem

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	7	7	West	EWS		Mar. 4 th 1820
2	6	5				Begins with strong breezes and passing clouds and
3	6	5				a highly following sea for
4	6	5				which I allow fifteen miles
5	6	5				west per compass.
6	6	5				
7	6	5				
8	6	5				
9	6	5	WBS East			
10	7	6				
11	7	6				At 4 A.M. set lower and
12	7	5				fore top mast studdg. sail.
1	6	5				
2	6	5				At 6 A.M. set the F.D. Mizzen
3	6	5				top gal. sail.
4	7	5	WBS			
5	7	5				Var. per az ^m at 7 ³⁰ 20° 48' W
6	7	5				Ends fine breezes & pleasant
7	7	5				weather.
8	7	5				
9	7	5				
10	7	5				
11	7	5				
12	7	5				

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
Sy 4 th 179	63	S 169			29° 18'	20° 48' W	193	42° 17'	East

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	7	7	WBS	EBS		Mar. 5 th 1820
2	7	7				Commences with fresh
3	7	7				breezes and pleasant wea-
4	7	7				ther.
5	7	7				
6	7	7				
7	8	5				At 6 P.M. took in shu-
8	8	5				ding sails and royals.
9	8	5				
10	8	5				Middle part strong
11	8	5				breezes and cloudy.
12	8	5				
1	8	5				At 5 A.M. took in F.D.
2	8	5				sails and double reefed the
3	8	5				top-sails & M. sail.
4	8	5				
5	8	5				N.B. There appears to be
6	8	5				a current from the N.W. Chan
7	8	5				
8	8	5				
9	8	5				
10	8	5				
11	8	5				
12	8	5				

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
Sy 4 th 190	52	188			30° 10'	24'	217	38° 30'	East

Ship China

China from Calcutta towards Sealem

H.	K.	H.K.	Courses.	Winds	L.W.	Remarks
1	3	5	W.B.N North			Mar 6 th 1820
2	3	5	S.W.			Ship under double reefed
3	1	5	South			top sails - a heavy sea -
4	3	5	S.W. by W. S.W.			At 2 P.M. took the F. S.M.
5	4		W.S.W. & Var.			T. G. sails.
6	3	5	W.B.N.			At 3 P.M. close reefed the
7	1	5	W.B.N.			T. sails, handed the M. sail
8	1	5	W.B.N.			and jib. - At 4.30 took in the
9	1	5	W.B.N.			T. & M. top sails and sent down
10	1	5				the T. & M. top gal. yards.
11	1	5				At 11 set the M. sail. - At 2 A.M.
12	2		W.S.W.			set the T. & M. top sails. At 11, mear
1	3					sail.
2	3					
3	4					
4	3					
5	3					
6	3					
7	2	5				
8	3					
9	3					
10	3	5				
11	4	5				
12	5	7				

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
N 81° W 65	10	65			29° 57'	25° 75'	37° 15'	East	

H.	K.	H.K.	Courses.	Winds	L.W.	Remarks
1	5		W.B.N. S.W. S.			Mar 7 th 1820
2	5					Begins with fresh bree-
3	5					zes and light squalls of rain.
4	5					in all necessary sail set.
5	6					
6	5		West S.W.			
7	5					
8	4	5				
9	4		W.B.N. S.E.			Middle part light airs
10	3					and squally.
11	3					
12	3					
1	2					
2	2					
3	2					
4	2					
5	1	5		East		
6	-		Calm			
7	-					
8	1					Latter part light airs
9	1					& calms.
10	-		Calm			
11	-					
12	3		W.S.W.			

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
N 75° W 69	17	66			30 12	25	77	35° 58'	East

Hiram Pulnam. Master

China from Calcutta towards Salem										
H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks May 8 th 1820				
1	4	7	N.W.	N.W.		Begins with fresh breezes and passing clouds. At 30 P.M. took in M royal. At 5 th P.M. took in T & G sails. At 5 th 30 close reefed the T. sails handed the M. and jib; double reefed the spanker, sent down royal yards and then set reefed M. sail At 4 th 30 A.M. let a reef from T. sail At 5 th 30 set M. sail jib & M. T. sail				
2	4	6								
3	4	5	S.W. B.W.	S.W.						
4	5									
5	5	5								
6	4	5		S.S.W.	5					
7	3									
8	3	6		West.	S.B.W.					
9	3	5								
10	3	7								
11	3									
12	3	5								
1	4									
2	4									
3	4	3								
4	4									
5	3									
6	3									
7	3	5								
8	4									
9	3									
10	3									
11	2									
12	1									
Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.	
By 5 th 55	15	54			30° 40'	25 th 63	34° 55'	East		
H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks May 9 th 1820				
1	1					Commences with light airs and calms with a heavy swell from the Westward At 9 P.M. sent up the M. Royal yard. Middle part light air and pleasant. At 1 A.M. set the fore top-mast-sliding sail. At 4 sent up the T. & G. Royal yards & set lower sliding sail.				
2	-									
3	-									
4	-									
5	1	5								
6	1	5								
7	2	5								
8	3	5								
9	3									
10	3									
11	3									
12	3									
1	3	3								
2	4									
3	3	3								
4	4									
5	3	5								
6	3	5								
7	3	5								
8	4									
9	4									
10	3									
11	3									
12	3									
Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.	
By 5 th 64	17 th 9	62 th			31° 02'	26	72 miles	33° 43'	East	

Ship China

China from Calcutta towards Salem

H.	K.	H.K.	Courses.	Winds	L. W.	Remarks
1	4		W.B.N.E.S.E			Mar. 19 th 1820
2	4	3				Begins with moderate
3	4	4				breezes and pleasant wea-
4	4	5				ther. At 1 P.M. set the
5	4	5				Starboard F.T.M. studding-sail
6	4	5				& took in the staysails.
7	4					At 7 P.M. took in the F.
8	5			East		and M. T. G. sails.
9	6					At 8 ³⁰ P.M. took in the
10	6					M. T. M. studding sail.
11	7					At 1 A.M. took in the Lar.
12	7					E. studding sail M. T. G. studding sail
1	7	3				& Spanker set. Var. Az. 26. W
2	7					
3	8					
4	7	8				
5	8					
6	8					
7	8			E.N.E.		
8	8					
9	7	8				
10	7	8				
11	3	9	West			
12	7	8				

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
S 74	168	48	162		31 ²⁴	26	189	30 ³⁴	East
N 13 ¹² allow 12 miles West for Compa									

H.	K.	H.K.	Courses.	Winds	L. W.	Remarks
1	7	5	West	E.N.E.		Mar. 10 th 1820
2	3	3				Commences with fresh
3	7	5	W.B.S.			breezes and fine weather
4	7					with a long following sea
5	8					for which together with
6	8					the current fifteen miles W.B.S.
7	8					
8	8			E.B.N.		
9	6					
10	5					
11	4					
12	4					
1	5					
2	4	5		East		Middle and latter parts
3	5					strong breeze and pleasant
4	5					all sail expanded to the
5	6					wind.
6	6					
7	6					
8	6	7		E.B.N.		
9	7					
10	7					
11	7					
12	7					

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
S 52	176	109	138		33 ⁴²	28	168	27 ⁴⁴	East

Thrum Pulnam Master

China from Calcutta towards Salem

H.	K.	H.K. Courses.	Winds.	L.W.	Remarks
1	6		West	EBN	Mar 12 th 1820
2	6				Commences with steady
3	6				breezes and pleasant weather
4	6				all necessary sail set
5	6				At 1 P.M. set the M. T. G.
6	5				study sails.
7	7				
8	6				
9	6				
10	6				
11	6				
12	4	6			Var. per az ^m at 4 ³⁰ 27 ¹² W
1	6				Middle part moderate
2	6				At 10 P.M. set the M. T. G.
3	5		ENE		M. T. G. study sail.
4	5				
5	5	5			At 8 A.M. set staysails
6	5	5			Ends pleasant
7	4	5			N.B. the cur. 20 S.W. per Comp.
8	4		W 1/2 N		
9	4			East	
10	4				
11	3				
12	4				

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
S 55 ¹ 158	76	130			35 ¹² 27 ¹² W	155	25 ¹⁴	East	

H.	K.	H.K. Courses.	Winds.	L.W.	Remarks
1	5	3	W 1/2 N	EBN	Mar 13 th 1820
2	5	5		ENE	Begins with moderate
3	5	7			breezes and pleasant weather
4	6	5			all sail expanded to
5	6	5			the wind.
6	6	5			
7	7				
8	6	5			Var per azimuth 2 ¹⁸ W
9	6	5	EBN		
10	6	5			Middle and latter part
11	6	5			moderate breezes & pleasant
12	6	5	East		
1	6				
2	6				
3	6	5			
4	6	5			N.B. For the current I
5	7				allow 40 miles S.W. per compass
6	7				
7	8				
8	8	5	ENE		
9	7				
10	6				
11	6				
12	4	5	ENE		

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
S 64 ¹ 180	80	101 ¹ W			36 ³⁰ 27 ¹² W	199	21 ¹⁵	East	

Ship China

China from Calcutta towards Salem

H.	K.	H.K.	Courses.	Winds	L. W.	Remarks
1	~					Mar 14 th 1820
2	~		Calm			24° Begins with light airs
3	~					
4	4		SWB	NWBN		and squally appearances.
5	3		NW			
6	2		NWBN	West		At 3 ³⁰ P.M. in Royals &
7	4		NBN			flying jib. At 4 P.M.
8	4		South	NW		tacked ship
9	2					
10	1	5	NBN	NW		
11	1	5	NBN			At 8 P.M. took in the
12	2		NBN			T. G. sails, Sit and Span-
1	1	5	NBN			ker
2	1	5	West			
3	2					
4	2					
5	2	5				
6	3		SWB	NW		Middle part strong br-
7	4	5	NBN			eezes squally with rain
8	4	5	NBN			NB current SW 30 miles.
9	5					
10	4	5				
11	4	5				
12	5	3				

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
N 69° W 52	18	N 48			36° 09'	27	60	20° 55'	East

H.	K.	H.K.	Courses.	Winds.	L. W.	Remarks
1	5	5	NW	NW		Mar 15 th 1820
2	6					Commences with fresh breezes
3	6					and pleasant weather set roy-
4	6					als and staysails.
5	6					
6	6	5	SWB			
7	6					
8	5					
9	7					
10	7	6				Middle part fresh breezes
11	7	6	SE			and squally weather Doubt
12	7	6				be reefed the F. & M. T. sails
1	8					
2	7	5				
3	7	5	SE			
4	7					
5	7					
6	7					
7	7	6				
8	7					
9	7					
10	7		NW			Ends squally ship under
11	7					reefed T. sails.
12	7	4				

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
N 68° W 170	62	N 158			35° 04'	26	193	17° 22'	East

Thiram Thudnam Master

China from Calcutta towards Salem

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	7		NW	SE		Mar 16 th 1820
2	6	3				Begins with strong breezes and squally, ship under single reefed topsails.
3	6	5				
4	6					
5	7		NW			
6	7					
7	7					At 5 P.M. let the reefs from the T. sails and set the top G. Sails.
8	8					
9	7		N.W. by N			
10	7	5				
11	7					
12	7	5				
1	7			South		
2	6	5				
3	6	5				
4	7		N.W.			Middle and latter parts fresh breezes and passing squalls.
5	7					
6	7	5				
7	7					
8	8					
9	8					
10	8					N.B. For the head of the sea to run per compass 20 ^m West
11	8					
12	8					

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Jo.
N 55 ^W	194	113	N 16 ^E		33 ²³	25 ^W	197	14 ⁰⁵ East	

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	8		N.W.	South		Mar. 17 th 1820
2	8					Commences with strong breezes and passing clouds all necessary sail set.
3	8					
4	8					
5	8					
6	7	5				
7	8					
8	7	5				Var. per az ^m 25 ⁰⁰ West.
9	8					
10	8	5				
11	8					
12	8					Middle part fresh breezes and passing clouds.
1	8					
2	8					
3	8					
4	8					At 8 A.M. set the Larboard M. T. M. stridge sail & T. G. stridge sails fore & aft.
5	8					
6	8					
7	7	5				
8	6	5				
9	6	5				
10	7					Ends pleasant.
11	8					
12	8					

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Jo.
N 84 ^W	184	128	137		31 ¹¹	25 ^W	163	11 ²² East	

Ship China

China from Calcutta towards Salem

H.	K.	H.K.	Courses.	Winds	L.W.	Remarks
1	8		WNW	South		Mar 18 th 1820
2	7	5				Begins with strong breezes and pleasant weather, all necessary sail expanded
3	7	5				
4	8					
5	7	5				
6	7					
7	7	5				
8	7	5				At 1 P.M. took in the F.
9	7	5				
10	8					T.G. studding sail.
11	7					
12	7					At 8 took in the M. T.G.
1	6	5				studding sails
2	6					
3	6					
4	6					At 8 A.M. let a reef from the M. T. sail.
5	5	7				
6	6	5				
7	7	6				
8	6	6				Ends strong breezes & a long
9	6	8				foaming sea for which I
10	6	8				allow 10 miles due West
11	6					
12	6					

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
N 48 ^W	172	115	N 129		24° 16'	24° W	150° W	8° 52'	East

H.	K.	H.K.	Courses.	Winds	L.W.	Remarks
1	6	6	NNW	South.		Mar 19 th 1820
2	7					Commences with moder-
3	6	4				ate breezes and pleasant
4	6					weather, all sail expanded
5	6					that will draw.
6	5	5				
7	5	7				Var per az ^m 22° 51' West
8	6					
9	5	7				
10	5	5				
11	5	5				
12	5	5				
1	4	5	NNW			
2	5	5				
3	5					
4	4					
5	3					
6	2	5				Latter part light breezes
7	1					& variable took in the studding
8	1					sails braced up the yards.
9	1					
10	6					
11	2					
12	1	5				

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
N 46 ^W	102	70	74		28° 00'	23° W	85° W	7° 27'	East

Thnam Putnam Master

China from Calcutta towards Salem

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	1	5	NB ^W WB ^N			Commences with light
2	3					breezes and clear.
3	2					At 6 ³⁰ P.M. took in the
4	2					trysails.
5	2	5	North ^W N ^W			
6	3					
7	2	5	NB ^W WB ^N			
8	1		NBE NB ^W			
9	1					
10	1	5				
11	2	5				
12	3	5	North ^W N ^W			
1	2	5				
2	1	5				Middle and latter parts
3	"		Balm			light breezes and pleasant
4	"					weather
5	1	5	NE ^{1/2} E NB ^W			
6	2	5				
7	4	5	NE ^{1/2} E			
8	4	5				
9	4	5	NE NN ^W			
10	4	5				
11	5		NE ^{1/2} E			
12	5	5				

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
N 2° E	55	56	2° E		26° 51' N	22° W	2° E	7° 29' East	

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	5		NEB NN ^W WB ^N			Begins with moderate
2	5					breezes and cloudy wea-
3	5		NBE & Var			ther, all sail set by the
4	5					wind.
5	5	5				
6	5					
7	5	5	NB ^W			
8	5					
9	4	5				Var. per az ^m 25° 46' W
10	6	5	N ^{1/2} W			Middle part moderate
11	6	5	NN ^W South			breezes and light squalls
12	6	5				set the Lar. T. T. U. & lower
1	5	5				struck sails.
2	5					
3	5	5				
4	5					
5	6					
6	6					
7	6	5				
8	6	5				
9	6	5				Latter part fine breezes
10	6					all struck sails set, before the
11	6					wind.
12	7					

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
N 41° W	128	97	N 81° W		25° 04' N	25° W	98	5° 54' East	

Ship China

China from Calcutta towards Salem

H.	K.	H.K.	Courses.	Winds	L. W.	Remarks
1	6	5	N.N.W. 1/2 N			Mar 22d 1820
2	6			S.S.E.		These twenty four hours
3	7					begins and ends with
4	6	6				strong trades and pass-
5	6	5				ing clouds all sail expan-
6	6	5				ded that will draw
7	6	7				
8	6	5				
9	6					
10	5	5				
11	5	5				
12	5	7		S.E.		
1	6					
2	6					
3	6					
4	6					
5	6					
6	5	5				
7	6					
8	6					
9	6					
10	6	5				
11	6					
12	6					

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
N 55° E	14 1/2	88	N 11° E		23° 31'	25°	129	3° 47'	East

H.	K.	H.K.	Courses.	Winds	L. W.	Remarks
1	5	5	N.N.W. 1/2 N			Mar 23d 1820
2	6			S.E. 1/2 S		Begins with fine bree-
3	5					zes and pleasant all sail
4	5					set before the wind. — Long
5	5	5				following sea for which
6	5	7				I allow on the course seven
7	5	7				miles.
8	5	7				
9	6					
10	5					
11	5					
12	5					
1	5	5				
2	5	5				
3	5	7				
4	6					
5	6					
6	6					
7	5					
8	5					
9	6					
10	5					
11	4	5				
12	4	5				

Latter part fine breezes & pleasant.

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
N 47° E	13 1/2	89	N 9° E	22° 02'		19	104	2° 03'	East

Thirum Putnam Master

China from Calcutta towards Salem

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	4	5	NE ^W W ^{SE}			Mar 24 th 1820
2	4	7				Begins with light bree-
3	5					zes and cloudy weather
4	5					all sail sail set before
5	5					the wind.
6	4	5				
7	4					
8	5	8				
9	5	5				
10	5					
11	6					
12	6					
1	6					Middle and latter parts
2	6					moderate breezes and
3	6	5				pleasant weather all
4	6					sail set.
5	5					
6	6					
7	6	5				
8	6	7				
9	6					
10	5	5				
11	6	3				
12	6	3				

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
N 45° E	134	95	N 95°	2° 35'	20° 41'	17°	102	00° 21'	East

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	5		NE ^W W ^{SE}			Mar 25 th 1820
2	5	5				Begins and ends with
3	6	5				steady trades and pleas-
4	6					ant all hands employ-
5	5					ed in unbending the
6	5					M. T. sail and repairing
7	5					it & sending it aloft.
8	6	5				Var per azon 20° 55' N
9	6					
10	6					
11	6					
12	5	7				
1	6					
2	6					
3	6	6				
4	5					
5	6					
6	6					
7	6					
8	6	5				
9	6					
10	6					
11	5					
12	5	5				

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
N 55° E	139	79	S 116°		19° 17'	21°	124	1° 43'	West

Ship China

China from Cacerilla towards Salem

H.	K.	H.K.	Courses.	Winds	L.W.	Remarks
1	5		NWBN	SE		Mar 26th 1820
2	5					Begins with moderate
3	5					breezes and steady trades
4	5	5				all sail expanded before
5	6					the wind.
6	6					Var per azm 19° 55 West
7	6					
8	6					
9	5	5				
10	6					
11	6					
12	6					
1	5	5				Middle part moderate
2	5					breezes and pleasant.
3	5					At 9 A.M. set the F & A
4	11					T. G. sails & flying jib took
5	5					the Lar Lower study sail
6	5					Ends pleasant
7	6					
8	5	5		SEBE		
9	6	5				
10	6	5				
11	6					
12	6					

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
N 52 W 110		68 N 87			18° 02	19 N 92 W	3° 15 West		

H.	K.	H.K.	Courses.	Winds	L.W.	Remarks
1	5		NWBN			Mar 27th 1820
2	4			SEBE		Begins with moderate
3	4					breezes and pleasant weather
4	4	5				all sail set before the wind
5	4					A long following sea for
6	5					which I allow fifteen miles
7	5					on the course.
8	5					
9	5			SE		
10	4	5				
11	4	5				
12	4	5				
1	4	5				
2	4	7				
3	4	3				
4	4	3				
5	4					
6	5					
7	4	5				
8	4	5				Ends with fine breezes
9	6					all sail expanded that will
10	6	4				draw.
11	5	3				
12	6					

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
N 51 W 130		80 N 101			16° 49	18 W 105	5° 00 West		

Henry Pitman Master

China from Calcutta towards Salem

H.	K.	H.K. Courses.	Winds.	L.V.	Remarks
1	4	5	NW B. N. S. S. S.		Commences with moder-
2	5	3			ate breezes attended with
3	6				light squalls of rain.
4	6				At 3 ⁴⁵ P.M. saw the Ist
5	5	7			and of St Helena bearing
6	5	7			N. B. E. per Compass Dist 9
7	5				Leagues.
8	5				Var per azimut 4 ³⁰ 18 ¹⁴ N
9	5				Middle part of the Island
10	5	4			N. B. E. 1/2 E.
11	5	7			Latter part pleasant.
12	5	3			NB 15 miles on N.W. B. N. head of sea
1	5	6			
2	5	3			
3	5	2			
4	5				
5	5				
6	5	5			
7	5	5			
8	5	5			
9	5				
10	4	5			
11	4				
12	5	5			

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
N 62 ¹ W	102	48 N	89		15 ²¹	18 ¹⁴	106	7 ³⁷	West

H.	K.	H.K. Courses.	Winds.	L.V.	Remarks
1	5	NW B. N. S. S. S.			Commences with pro-
2	3				derate breezes and cloudy.
3	3				
4	3				
5	3	5			
6	3	5			
7	3	5			
8	3				
9	3				
10	6				
11	3				
12	4				
1	4				
2	3	5			
3	3	5			
4	3	5			
5	6				
6	5	5			
7	4	8			
8	4	4			
9	4	4			
10	3				
11	3	6			
12	4	5			

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
N 62 ¹ W	102	78	93	14 ⁰³	17 ¹⁶	17 ¹⁶	76	9 ¹⁰	West

Ship's Log

from *St. Louis* towards *St. Louis*

H.	K.	H.K.	Courses.	Winds	L.W.	Remarks
1	5	5	W	SE		
2	5	5				
3	5	5				
4	5	5				
5	5	5				
6	5	5				
7	5	5				
8	5	5				
9	5	5				
10	5	5				
11	5	5				
12	5	5				
1	5	5				
2	5	5				
3	5	5				
4	5	5				
5	5	5				
6	5	5				
7	5	5				
8	5	5				
9	5	5				
10	5	5				
11	5	5				
12	5	5				

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
W	100	54	102		19 20	10 2	102	10 22	19 20

H.	K.	H.K.	Courses.	Winds	L.W.	Remarks
1	5	5	W	SE		
2	5	5				
3	5	5				
4	5	5				
5	5	5				
6	5	5				
7	5	5				
8	5	5				
9	5	5				
10	5	5				
11	5	5				
12	5	5				
1	5	5				
2	5	5				
3	5	5				
4	5	5				
5	5	5				
6	5	5				
7	5	5				
8	5	5				
9	5	5				
10	5	5				
11	5	5				
12	5	5				

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
W	100	54	102		19 20	10 2	102	10 22	19 20

Blue Room - Blue

		from		towards	
H.	K.	H. K. Courses.	Winds.	L. W.	Remarks
1	5				
2	5				
3	5	5			
4	5	5			
5	5				
6	5				
7	5				
8	5				
9	5				
10	5	5			
11	5				
12	5	5			
1	5				
2	5				
3	5				
4	5				
5	5				
6	5				
7	5				
8	5	5			
9	5	5			
10	5				
11	5				
12	5				

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
40	10	17	10		10-05	10	10	10-05	10-05

H.	K.	H. K.	Courses.	Winds.	L. W.	Remarks
1						
2						
3	5	5				
4	5	5				
5						
6						
7						
8						
9						
10		5				
11						
12						
1						
2	5	5				
3	5	5				
4	5	5				
5	5	5				
6	5	5				
7	5	5				
8	5	5				
9	5	5				
10	5	5				
11	5	5				
12	5	5				

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
		75	103		10-07	10	75	10-04	10-04

from

towards

1891

N.	K.	H.K.	Courses.	Winds	L.W.	Remarks
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
182	141	27	101		187	101	100	175	181

N.	K.	H.K.	Courses.	Winds	L.W.	Remarks
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
180	104	29	100		183	100	100	175	180

Thames River Master

from *Salisbury* towards *London*

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	0					
2	0					
3	0					
4	0					
5	0					
6	0					
7	0					
8	0					
9	0					
10	0					
11	0					
12	0					
1	0					
2	0					
3	0					
4	0					
5	0					
6	0					
7	0					
8	0					
9	0					
10	0					
11	0					
12	0					

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
<i>N 1/2 E</i>	<i>40</i>	<i>10</i>			<i>51 13</i>	<i>4</i>		<i>16 5</i>	<i>71 25</i>

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	0					
2	0					
3	0					
4	0					
5	0					
6	0					
7	0					
8	0					
9	0					
10	0					
11	0					
12	0					
1	0					
2	0					
3	0					
4	0					
5	0					
6	0					
7	0					
8	0					
9	0					
10	0					
11	0					
12	0					

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
<i>N 1/2 E</i>	<i>80</i>	<i>20</i>	<i>59</i>		<i>51 13</i>	<i>13</i>	<i>00</i>	<i>21 02</i>	<i>71 25</i>

from *Valencia* towards

No.	K.	H.K.	Courses.	Winds	L. W.	Remarks
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						

Course.	Dist.	Diff Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Variā.	Diff. Long.	Long. in	Long. by Ob
N 60 E	10	1'	0"	47° 38' N	47° 38' N	0	15'	90° 00'	90° 00'

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
1						
2						
3						
4	5					
5		5				
6	5					
7		5				
8	5					
9		5				
10	5					
11	5					
12	5					

Course.	Dist.	Dif. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
W. S. W.	10	1'	0"	—	—	—	—	—	—

from *London* towards *Edin.*

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
44	115	71	10	000		100	71	20	000

Course	Dist	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
20	10	28	80		1° 25' 10"	10	81	26° 26' 25"	

Ship's Journal

From Calcutta towards Siam

11.	K.	H.K.	Courses.	Winds	L.W.	Remarks
1	4	5	N.W.	N.W.	3	Commenced with strong breezes and passing clouds all necessary sail set in the wind.
2	4	1				
3	3	5				
4	2					
5	3					
6	3	4				
7	3					
8	3					
9	11	1	N.W.			
10	11	1				
11	11					Middle part strong breeze and squally with rain with in 2 miles sail as necessary.
12	3					
1	4					
2	4					
3	11	5	N.W.			
4	11	8				
5	3					
6	11	2				
7	11					
8	11					
9	11					Ends with strong breezes and cloudy
10	11	3				
11	11	5				
12	3					

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
51° N	90	60	80		2° 17' N	60° 51'		2° 47' E	

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	11		N.W.	N.W.	3	These twenty four hours strong breezes and passing clouds and heavy swell all necessary sail set in the wind.
2	11					
3	11					
4	3					
5	3					
6	11					
7	11					
8	11					
9	5	5	N.W.			
10	5					
11	3					
12	3					
1	3					
2	11					
3	11					
4	11					
5	3	3	N.W.			
6	11					
7	11	3	N.W.			
8	11					
9	3					
10	3					
11	11					
12	3					

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
N 30° E	150	95	114		3° 42' N	115°		29° 42' E	

China from Calcutta towards Salem

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	5		NW 1/2 N	NE B N 3		Commences with strong breezes and passing clouds all necessary sail set by the wind
2	6					
3	6		NW B N			
4	6					
5	6	7				
6	6	5	NW 1/2 N			
7	4					
8	4					
9	6	4	NW B N			
10	6	3				
11	6					
12	6	4				
1	6					At 5 P.M. took in the flying jib Middle and latter parts strong breezes & cloudy
2	6					
3	6					
4	6					
5	6	4				
6	6	3				
7	6	4				
8	6	4				
9	6	5				
10	6	7				
11	6	8				
12	6	5				

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
N 40° W	128	89	90	5° 11'			7° 19'	31° 13'	West

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	6		NW B N	NE B N		Begins with strong breezes & cloudy At 8 P.M. single reefed the topsails
2	6					
3	5		NW B N			
4	5	7	NW B N			
5	6					
6	6					
7	4					
8	6	5				
9	6					
10	4					
11	4	5				
12	4					
1	6	5				Middle and latter parts strong breezes squally small rain.
2	6					
3	6	4				
4	6	3				
5	6	5				
6	4					
7	6	5				
8	4					
9	6	5				
10	6					
11	6	4				
12	6	4				

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
N 48° W	155	103	114		7° 01'	6	115	33° 08'	West

Ship China

China from Calcutta towards Salem

H.	K.	H.K.	Courses.	Winds	L.W.	Remarks
1	6	7	SW by S	SE	6	Commences with fresh breeze and passing clouds with necessary sail set on the wind.
2	6	7				At 10.30 P.M. took in the S.
3	6	7				all topgallant sails.
4	6	7				Middle part squally with small rain.
5	6	7				
6	6	7				At 9.30 A.M. set the S.
7	6	7				Sail
8	6	7				Ends with strong breeze & cloudy.
9	6	7				
10	6	7				
11	6	7				
12	6	7				

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
N 44 W 158	114	110			8° 38'	4° 11'	111	34° 59'	West

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	6	5	SW by S	NE	4	Begins with fresh breezes and squally appearances all necessary sail set.
2	6	5				At 4 P.M. let a reef from the M. S. sail
3	6	5				
4	6	5				At 7 A.M. let a reef from the fore topsail.
5	6	5				
6	6	5				Ends with strong breeze & cloudy.
7	6	5				
8	6	5				
9	6	5				
10	6	5				
11	6	5				
12	6	5				

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
N 44 W 168	121	110			11° 00'	4° 11'	118	36° 5'	West

Hiram Putnam Master

China from Calcutta towards Salem

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	7	5	SW by S			Commences with strong breezes and passing clouds all necessary sail set.
2	7	5				
3	7	2				
4	7					
5	7					
6	10	6				
7	10	5				
8	10	5				
9	10					
10	10	5				
11	10					Middle part strong breezes and squally appearances.
12	10					
1	10	5				
2	10	5				
3	10	5				
4	10	5				
5	10					
6	10					
7	10					
8	10					
9	10					At 10 A. M. took in the S. and all top-gallant sails. Ends with strong breezes & squally.
10	10					
11	10	6				
12	10	6				

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
N 40° W	175	134	113		13° 12' N	00	116	38° 00'	West

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	7	5	SW by S			Comes in with strong breezes and strong weather all necessary sail set.
2	7	5				
3	7	5				
4	7					
5	7	5				
6	10	5				
7	10	3				
8	10	7				
9	10	6				
10	10	5				
11	10					Middle part strong breezes & squally.
12	10					
1	10					
2	10					
3	10					
4	10	6				
5	10					
6	10					
7	10					
8	10					
9	10	5				At 10 P. M. took in the S. & all T. G. sails. At 12 P. M. reefed the S. sails.
10	10					
11	10	5				
12	10	5				

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
N 40° W	172	132	111		15° 25' N	00	115	40° 45'	West

Ship China

China from Calcutta towards Salem

H.	K.	H.K.	Courses.	Winds	L.W.	Remarks
1	5	5	SW by E	SE		Commences with strong
2	7					breezes and passing clouds.
3	7			East		all necessary sail set.
4	7					At 1 P.M. set the F.T. stud
5	7					sail
6	7	5				At 2 P.M. set the starboard
7	7					lower study sail to royals.
8	7	5				At 4 P.M. in lower study
9	7					sails and royals.
10	7	7				At 7 A.M. in F.T. study sail
11	7	7				Ends with strong breezes to
12	7	8				cloudy.

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
N 44° 17'	126	114			17° 29'	28	120	42 48	West

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	6	5	SW by E	SE		Begins with strong breezes
2	6	5				and misty weather, all necessary
3	6					sail set - Watch employed
4	6	5				in painting.
5	6					Weather part moderate
6	6					breezes and pleasant weather.
7	6					At 6 A.M. set the F.T. stud
8	6					and F.C. study sails to
9	6	5				study sails.
10	6	5				Ends pleasant.
11	6					
12	6					

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
N 34° 14'	119	86			17° 30'		84	44 12	

Hiram Putnam Master.

China from Calcutta towards Salem										
H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks April 21st 1820				
1	5	5	N.W.B.N.E			Commence with moderate breezes and pleasant weather all necessary sail set. People employed in painting the ship.				
2	5	5								
3	5	5								
4	5	5								
5	5	5								
6	5	5								
7	5	5								
8	5	5								
9	5	5								
10	5	5								
11	5	5	N.W.B.N.E			At 7 3 P.M. took in F.T.M. & M.T. G. studding sail.				
12	5	5								
1	5	5								
2	6	5								
3	6	5								
4	5	5								
5	5	5								
6	5	5								
7	5	5								
8	5	5								
9	5	5	N.W.B.N.E			At 2 A.M. squally took in royals & flying jib				
10	4	5								
11	2	5								
12	2	5								
1	2	5								
2	2	5								
3	2	5								
4	2	5								
5	2	5								
6	2	5								
Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.	
N 36 E	122	99	72	" "	21 18	2 44	78	45 30	West	

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks April 22d 1820				
1	2		N.W.B.N.E			Commences with light airs and pleasant weather people employed in painting the ship inside.				
2	1									
3	1									
4	1									
5	1									
6	1									
7	2									
8	4	5								
9	3	5								
10	4	5								
11	3	5	N.W.			Middle part light squalls and misty weather				
12	3	5								
1	4									
2	4									
3	5									
4	4	3								
5	5									
6	4	6								
7	5									
8	5									
9	4		N.W.			Ends moderate breezes & pleasant weather.				
10	4									
11	3	5								
12	3	5								
1	3	5								
2	3	5								
3	3	5								
4	3	5								
5	3	5								
6	3	5								
Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.	
N 34 E	80	47	64		22 09	2 44	69	46 29	West	

Ship China

China from Calcutta towards Salem

L.	K.	H.K.	Courses.	Winds	L.W.	Remarks
1	3	5	NW	NNE	1	Commences with light breezes and pleasant weather all necessary sail set on the wind
2	3					
3	2	5				
4	2					
5	2	6	NW	NNE		
6	3		NW	NNE		
7	4		West			
8	3					
9	2	5	W	W		
10	2	5				
11	3		West	NNE		Middle part light breezes and a fine moon shine night 2:18 West
12	3					
1	3	5				
2	3	5				
3	3	5				
4	3		NNE			
5	3	5				
6	3	5				
7	4		W	W		
8	3	5				
9	3	5	W	W		
10	3					
11	3		West			
12	3					

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
N 88° W 84	10	84	-	-	22° 24' 24" W	91	46° 14'	West	

L.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	3		W	W		
2	4					
3	3					
4	3					
5	3		West	NNE		
6	1	5				
7	"					
8	"					
9	1	5	W	W		
10	"					
11	"					
12	"					
1	2		NW	NNE		
2	2	5				
3	5					
4	5	5				
5	6					
6	5	5	NW	NNE		
7	5					
8	5		NW	NNE		
9	5	5				
10	6					
11	5					
12	4					

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
N 44° W 75	50	54	"	"	22° 51' 0"	59	49° 9'	West	

Henam Pullnam: Master

China from Calcutta towards Salem

H.	K.	H.K. Courses.	Winds.	L.W.	Remarks
April 25 th 1820					
1	5	5	N.W. B.	N.E. B.	Begins with moderate breezes and pleasant weather all necessary sail set.
2	5				
3	5	5			
4	5	5			
5	5				
6	4	5			
7	3	5			
8	4	5	E B.		
9	4				
10	4				
11	2	5			Middle part light breezes and pleasant.
12	2	5			
1	2		S.E.		
2	2				
3	2	5			
4	2	5			
5	1	5			
6	1	5			
7	1	5			
8	2				
9	2				Latter part light breezes & a heavy swell.
10	2	5			
11	2	5			
12	2				
	2				
People employed in unloading the 1 st 5 sails & 1 st 5 tending others.					

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
N 34 W	134	63	43	" "	23 55	00	48	84 31	West

H.	K.	H.K. Courses.	Winds.	L.W.	Remarks
1	3	N.W. B.	S.E.		Commences with light breezes and pleasant weather all necessary sail set.
2	3	5			
3	3	5			
4	3				
5	2		S.W.		
6	4				
7	4				
8	4	5	S.W.		
9	5	5			
10	6				Middle part strong breezes and pleasant weather.
11	6				
12	6				
1	6	5			
2	by				
3	by				
4	by				
5	by	6			
6	by				
7	by				
8	by				Latter part strong breeze and small swell.
9	by				
10	by	5			
11	by				
12	by				

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
N 34 W	135	112	76	25 45	" "	0	84	51 21	West

Ship Chron

Enina from Calcutta towards Salem

H.	K.	H.K.	Courses.	Winds	L.W.	Remarks
1	15		NE	SE		April 27th 1820
2	1					Begins with fresh breeze
3	1					is and rainy weather.
4	2			SE		At 1.30 P.M. took in the T.
5	3					T mast stridingsail to M.T.
6	2					most staysail.
7	3					
8	4					
9	4					
10	6			SE		At 6 P.M. set the M.T. &
11	6					stridingsail
12	6					
1	6			SE		At 10 P.M. set T.T. &
2	5					Lower stridingsail
3	4					
4	3					
5	2	5				
6	2	5				
7	2	5				
8	2			SE		Lighter part cloudy & rainy
9	3					weather took in T. G. & Lower
10	1					stridingsail.
11	1					
12	2					

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
N 21° W	70	37	26° 35'	" "	0	42	32° 03'	West	

H.	K.	H.K.	Courses.	Winds	L.W.	Remarks
1	3	3	NE	SE		April 28th 1820
2	4					Commences with moderate
3	4	6				all hands and much rain
4	5					weather.
5	2	5				
6	3	5		SE		
7	3	5		SE		
8	2			SE		
9	3	5		SE		
10	3	5		SE		Middle part light breeze
11	2					and variable took in
12	1					all stridingsails
1	1	5				
2	1	5				
3	1	5				
4	1	5				
5	1			SE		
6	4			SE		Light part heavy rains
7	4	5		SE		
8	4	5				
9	5					
10	5	7		SE		
11	5					
12	1	1				

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
N 21° W	73	30	26° 35'	" "	24° 4'	45	32° 48'	West	

Hiram Putnam Master

China from Calcutta towards Salem

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	5		NE	W		Commences with strong
2	3		NE	W		breezes and squally
3	2		NE	W		
4	2		NE	W		At 30 P.M. double reefed
5	1		NE	W		the top sails.
6	"		NE	W		
7	"		NE	W		
8	"		NE	W		
9	"		NE	W		
10	"		NE	W		At 4 P.M. wore ship to
11	"		NE	W		the N. to W.
12	"		NE	W		
1	"		NE	W		Var per azm at 6.56-1413
2	"		NE	W		
3	1		NE	W		
4	1		NE	W		
5	1		NE	W		Latter part light breezes
6	1		NE	W		& pleasant
7	1	5	NE	W		
8	1	5	NE	W		
9	1		NE	W		
10	1		NE	W		
11	1		NE	W		
12	1		NE	W		

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Jo.
N 31 W 17	14	9			28 27	4 W 11	52 56	West	

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	1		NE	W		Commences with light
2	1		NE	W		winds and pleasant weather
3	1		NE	W		
4	1	5	NE	W		all necessary sail set.
5	1	5	NE	W		
6	1	5	NE	W		
7	1	5	NE	W		
8	1	5	NE	W		
9	1	5	NE	W		
10	2	8	NE	W		
11	2	8	NE	W		
12	2	8	NE	W		
1	1		NE	W		Middle part light breeze
2	"		NE	W		and calms. - People
3	2		NE	W		employed in packing the
4	3		NE	W		cables &c.
5	4		NE	W		
6	5		NE	W		Ends strong breezes &
7	5		NE	W		pleasant weather.
8	5		NE	W		
9	5	4	NE	W		
10	6		NE	W		
11	6		NE	W		
12	5	8	NE	W		

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Jo.
N 48 W 64	102	19			29 23	0	22	53 21	West

Ship China

China from Calcutta towards Salem

11.	K.	H.K.	Courses.	Winds	L. W.	Remarks.
						May 1st 1820
1	6		NW	W		Begins with fresh breeze
2	4					and cloudy
3	3		NW	W		
4	3					
5	3					
6	3					At 1 P.M. squally, took
7	3					the Royals flying jib T. L.
8	3					sails & jib and single
9	2					reefed the F. B. L. T. sails
10	4					At 2 ³⁰ P.M. main sail
11	4					At 4 P.M. let a reef from
12	4					the F. T. sail
1	4					At 5 P.M. in Royals &
2	4					flying jib
3	4					Ends present
4	4					
5	4					
6	3	5				
7	2					
8	2					
9	2					
10	1					
11	1					
12	1					

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
N 108	78	76	14	"	30° 29'	0	17	53° 04'	West

H.	K.	H.K.	Courses.	Winds.	L. W.	Remarks.
						May 2d 1820
1	2		NW	W		Commenced with light
2	2	5	NW	W		breeze and pleasant sea
3	2					then employed in getting
4	1	5				the anchors on the bow
5	2					A boat in sight
6	1	5				At 1 P.M. lashed ship
7	2					to the W.
8	1	5				
9	1					Ends light breeze & pleas
10	1					and.
11	1	5				
12	2					

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
N 108	11	8	7	30° 36'	"	0	9	50° 13'	West

Hiram Hulman Master

China from Calcutta towards Salem

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	2	5	NW by W	SW		May 3d. 1820
2	3	5				Begins with light breezes &
3	3	5				pleasant weather, all necessary
4	4					sail set
5	4					
6	4	ny		South		
7	4	5				
8	4					
9	5					
10	5	4				Middle part fresh breezes &
11	6					flawey took in T. G. studd-
12	ny					sails.
1	ny					
2	ny	2				
3	ny	6				
4	ny	6				At 5 A.M. took in the Roy-
5	ny	6				als mizen T. G. sail & single
6	ny	8				reefed the spanker. At 9 in
7	8			SEW		FT Mast studd-sail
8	8					
9	8					
10	ny	10				
11	ny	10				
12	ny	10				

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
N 32° W	140	125	ny	8	"	"	32 41	4° W 92	54° 45 West

H.	K.	H.K.	Courses.	Winds.	L.W.	Remarks
1	8		NW by W	SEW		May 4th 1820
2	8					Begins with strong breezes
3	8					At 3 P.M. took in T. J. G. sail
4	8					& reefed mizen top sail.
5	5					
6	6					
7	6	8		SEW		At 4 P.M. a heavy squall
8	6	6				took in the M. T. G. sail &
9	6	3				double reefed the fore & M.
10	6					tops-sails.
11	6					
12	6					
1	5					
2	4	5				At 5 P.M. close reefed the
3	4					top-sail, took in main-sail
4	5			W by W		& jib sent down Board yards
5	4	5				
6	3	5				
7	3	5	North			
8	3	5				
9	3	ny	NW by W	W		At meric took in F. H. T. sail
10	3	6				
11	4		NW by E			At 3 set F. H. all top sails
12	3	5				& reefed all main sail

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
N 32° W	126	107	66	"	"	"	34 37 5	79	56° 04 West

Ship *Chimera*

Chimera from *Catubutau* towards *Sulem*

H.	K.	H.K.	Courses.	Winds	L.W.	Remarks
1	3		NVE	NW 10°		May 5th 1820
2	3					Begins with strong
3	3		NVE/ENW			gales and a heavy sea;
4	3	3				ship under double reefed
5	3	3	NEN			top sails
6	3	3				
7	3	3				
8	3	3				
9	2	3				
10	2	3				At 1:30 P.M. reefed fore &
11	2	3				sail
12	2	3				
1	2	3				
2	2	3				At 9:30 A.M. took in the
3	2	3	NVE/ENW			all sail
4	2	3				
5	3		NVE			
6	2	3				
7	2	3				
8	2	3				Ends with strong gales
9	2	3				
10	2	3	NVE			
11	2	3				
12	2	3				

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
N 40° E	68	32	44	" "	33 25	8 W 33		55 11	West

H.	K.	H.K.	Courses.	Winds	L.W.	Remarks
1	1	3	N 13° E	NW 13 1/2°	2 1/2	May 6th 1820
2	1					Commences with strong
3	1		N 13° E	NW 13 1/2°		gales ship under close reefed
4	1	3				top sails
5	1	3	NVW	NW 13 1/2°		
6	1	3				
7	2	3	NVW	NW 13 1/2°		
8	2	3				
9	3	3				
10	3	3		SW		Middle part strong gales
11	4	3				and heavy sea.
12	3	3				
1	5			SW		From 4 to 8 P.M. set the
2	6					all sail let a reef from the
3	6					J. sail to M. J. sail
4	7	3				
5	7	3				
6	7	3				
7	7	3				
8	7	3				Ends strong gales to cloudy
9	7	3	NVW			
10	7	3				
11	7	3				
12	7	3				

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
N 45° W	103	73	73	" "	36 24	8 W 91		56 44	

Hiram Putnam Master

China from Calcutta towards Japan

H.	K.	H.K. Courses.	Winds.	L.W.	Remarks May 18 1820
1	7	W.N.W	S.E		Commences with strong breeze
2	7				and squally
3	7				
4	7				
5	7				
6	7				At 1 P.M. saw a ship standing
7	6				ing to this N.W.
8	5		E by S		
9	5	W.W	E.S.E		At 2.30 P.M. took in the old
10	5				T. G. sail.
11	5				
12	5				
1	6		East		
2	5				At 9.30 set set double reefed
3	5				spanker.
4	5				
5	5		E.N.E		At 5.30 A.M. let a reef from
6	6				
7	6				
8	6		N.E		let sail T. G. sail to spanker
9	6				
10	5				At 10.50 let a reef from T. G. sail
11	6				
12	4		East		Ends pleasant

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
N 57° W	142	77	119	" "	37° 30	5° W	119	59° 11	

H.	K.	H.K. Courses.	Winds.	L.W.	Remarks May 18 1820
1	4	N.W	East		Begin with strong breeze
2	3				and squally appears to
3	6		E.N.E		a high reef seen shrouned sail.
4	10				
5	7		N.E		
6	10				
7	6				
8	6				
9	6				
10	5		E.N.E		Middle part more moderate
11	5				mod sail.
12	5				
1	5				At 5 A.M. set the old sail
2	5				let a reef from the T. G. sail.
3	6				
4	7				T. sail and spanker.
5	10				
6	10				At 10.30 set T. G. sails to job
7	10				
8	10				At 8.30 reef from old T. sail.
9	10				
10	10				
11	10				
12	10				Ends pleasant.

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
N 56° W	148	82	123	" "	38° 49	11°	157	61° 48	

Ship China

China from Calcutta towards Aden

H.	K.	H.K.	Courses.	Winds	L.W.	Remarks
1	7	5	NW	ENE		May 9th 1820
2	6	5				Begins with fine breezes
3	6	6				and pleasant weather all
4	6	3				necessary sail set.
5	6	3				
6	6	6				
7	7	4		NE		
8	7	8				At 4:30 P.M. let a reef from
9	6	3				the fore topsail set the S.T.
10	5	7		NEB		all studdingsail is sent up the
11	6					the royal yard
12	5	4				
1	4					
2	4					
3	4	5	WNW North			Middle part moderate & cloudy
4	4		WBN			
5	4	5	WBN			At 3 P.M. took the S.T. all
6	4		WBN			1st of sail. At 8 P.M. reefed
7	4	5	WBN			single reefed at 5 sail
8	4	5				at 9 P.M. all royal yard.
9	4	5				
10	4	5				
11	4	5	West			
12	4	7				

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
WNW 126	45	117	39°34'	"	"	10°W	131	64°19'	

H.	K.	H.K.	Courses.	Winds	L.W.	Remarks
1	5		West	WNW		May 10th 1820.
2	5	5				Begins with strong breezes
3	4		WNW			and cloudy.
4	4					
5	4	5	WNW			
6	4					
7	3	5	WNW			
8	3	5				Middle part moderate
9	3	5				breezes and clear weather.
10	3					
11	3					
12	3					
1	3					
2	3		WNW			At 5 P.M. let a reef from
3	3					the topsails were set top gal
4	3					sails to job.
5	2					
6	2					
7	2	5	WNW			Ends with light breezes
8	3					& pleasant in the night from
9	4	5	WNW			the wind.
10	4					
11	4					
12	5	5				

Course.	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
WNW 8	29	11	27	"	"	39°39'	11°W	36	64°54'

Hiernam Putnam - Master

China from Cebu towards Siam				
H.	K.	H.K. Courses.	Winds.	L.W. Remarks
1	5			May 11th 1870
2	4			Commenced with fresh breeze and passing clouds.
3	5			
4	3			
5	2			
6	2			
7	2			
8	1			Middle part moderate.
9	2			
10	2			at 1:30 in the forenoon
11	3			of the fore topsail
12	3			
1	4			at 4:30 set the staysails to sail
2	6			up the royal yards. At 5 set S.
3	5			
4	4			
5	4			
6	3			of studsails. at 8 set S S S S S
7	4			
8	4			at S S S studsails.
9	4			
10	5			ends present.
11	6			
12	5			

Course	Dist.	Diff. Lat.	Dep.	Lat. by D. R.	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
N 42° E	4	55	50	"	40° 42'	11° 7'	6	66° 1'	69

H.	K.	H. K.	Courses.	Winds.	L. W.	Remarks
1						May 11 1888
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Course	Dist.	Diff. Lat.	Dep.	Lat. by D R	Lat. by Ob.	Varia.	Diff. Long.	Long. in	Long. by Ob.
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
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